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ANNUAL REPORT
OF THE
DEPARTMENT OF NATIONAL
HEALTH AND WELFARE

FOR THE
FISCAL YEAR ENDED
MARCH 31, 1951



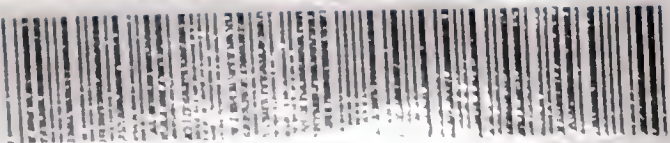
OTTAWA

Edmond Cloutier, C.M.G., O.A., D.S.P.

Printer to the King's Most Excellent Majesty

1951

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*To His Excellency Field Marshal the Right Honourable the Viscount
Alexander of Tunis, K.G., G.C.B., G.C.M.G., C.S.I.,
D.S.O., M.C., LL.D., A.D.C.,
Governor-General and Commander-in-Chief of Canada.*

May it Please Your Excellency:

The undersigned has the honour to present to Your Excellency the
Annual Report of the Department of National Health and Welfare for the
fiscal year ended March 31, 1951.

Respectfully Submitted,

PAUL MARTIN,
Minister of National Health and Welfare.

April 1, 1951.

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DEPARTMENT OF NATIONAL HEALTH AND WELFARE

MINISTER

HONOURABLE PAUL MARTIN, K.C., P.C., M.P., M.A., LL.M., LL.D.

DEPUTY MINISTER OF NATIONAL HEALTH AND WELFARE (HEALTH)
G. D. W. CAMERON, M.D., C.M., D.P.H.

DEPUTY MINISTER OF NATIONAL HEALTH AND WELFARE (WELFARE)
G. F. DAVIDSON, B.A., M.A. Ph.D.

HEALTH BRANCH

Director of Health Services,
H. A. ANSLEY, M.D., D.P.H.

Assistant, B. D. B. LAYTON, M.D.

Assistant Director of Health Services,
F. S. PARNEY, M.D.

Chief, Blindness Control Division,
J. H. GROVE, M.D.

*Chief, Child and Maternal Health
Division,*
ERNEST COUTURE, M.D., C.M.

Chief, Civil Aviation Medicine Division,
H. E. WILSON, M.D.

Chief, Civil Service Health Division,
R. G. RATZ, M.B.

Chief, Dental Health Division,
H. K. BROWN, D.D.S., D.D.P.H.

Chief, Epidemiology Division,
A. F. W. PEART, M.B.E., M.D., C.M.
D.P.H.

Chief, Hospital Design Division,
H. G. HUGHES, B.Arch., A.R.I.B.A.,
M.R.A.I.C.

Chief, Industrial Health Division,
K. C. CHARRON, M.D.

Chief, Industrial Health Laboratory,
K. KAY, M.A., Ph.D.

Chief, Laboratory of Hygiene,
J. GIBBARD, B.S.A., M.Sc.

Chief, Mental Health Division,
C. G. STOGDILL, M.A., M.D.

Chief, Narcotic Control Division,
K. C. HOSSICK

Chief, Nutrition Division,
L. B. PETT, B.S.A., M.A., Ph.D.,
M.D., F.A.P.H.A., C.P.H.

*Chief, Public Health Engineering
Division,*
J. R. MENZIES, B.A.Sc., O.L.S., C.E.

*Chief, Quarantine, Immigration Medi-
cal and Sick Mariners Services,*
H. D. REID, M.D.

Director of Health Insurance Studies,
F. W. JACKSON, M.D., D.P.H.

*Assistant Directors of Health Insurance
Studies,*
G. E. WRIDE, M.D., D.P.H.
EMILE MARTEL, M.D., D.P.H.

Director, Food and Drug Divisions,
C. A. MORRELL, M.A., Ph.D.,
F.R.S.C.

*Assistant Director, Food and Drug
Divisions,*
A. PAPINEAU-COUTURE, B.A.

Chief, Laboratory Services,
L. I. PUGSLEY, B.A., M.Sc., Ph.D.

A/Chief, Inspection Services,
W. A. CRANDALL, B.A., M.Sc.

*Chief, Proprietary or Patent Medicines
Division,*
L. P. TEEVENS.

Director, Indian Health Services,
P. E. MOORE, M.D., D.P.H.

*Assistant Directors, Indian Health
Services,*
H. A. PROCTOR, M.D.,
O. LEROUX, M.D.

WELFARE BRANCH

*National Director of Family
Allowances,*
R. B. CURRY, B.A., LL.B.

Director, Old Age Pensions Division,
J. W. MacFARLANE.

Executive Assistant (Welfare),
Mrs. D. B. SINCLAIR, O.B.E.,
B.A., M.A., LL.D.

*Assistant Director, Physical Fitness
Division,*
DORIS W. PLEWES, M.A., B.Paed.,
Ed.D.

CIVIL DEFENCE

Co-Ordinator, Maj. Gen. F. F. WORTHINGTON, C.B., M.C., M.M. (and Bar).

ADMINISTRATION BRANCH

Departmental Secretary,
Miss O. J. WATERS.

Legal Adviser,
R. E. CURRAN, K.C., B.A., LL.B.

*A/Director, Information Services
Division,*
F. W. ROWSE, M.J.I.

Chief, Research Division,
J. W. WILLARD, M.A., M.P.A., A.M.

Departmental Librarian,
Miss M. D. MORTON, B.H.Sc., B.L.S.

Chief, Purchasing and Supply Division,
J. A. HICKSON.

Chief, Personal Division,
H. S. HODGINS, M.B.E., B.A.

Chief, Translation Office,
G. A. SAUVE.

Chief Treasury Officer,
T. F. PHILLIPS

DIRECTORY OF DEPARTMENTAL ESTABLISHMENTS

ADMINISTRATIVE OFFICES

OTTAWA—Jackson Building, Bank and Slater Streets

FAMILY ALLOWANCES REGIONAL OFFICES

ST. JOHN'S—29 Buckmasters' Field

CHARLOTTETOWN—59 Queen Street

HALIFAX—Industrial Building

FREDERICTON—City Hall

QUEBEC—51 Boulevard des Capucins

TORONTO—122 Front Street West

WINNIPEG—Lindsay Building

REGINA—Saskatchewan Motors Building, Broad Street

EDMONTON—10201, 100th Street

VICTORIA—Weiler Building

FOOD AND DRUG LABORATORIES

OTTAWA—35 John Street

HALIFAX—Dominion Public Building (P.O. Box 605)

MONTREAL—379 Common Street

TORONTO—65 Victoria Street

WINNIPEG—Aragon Building, 244 Smith Street

VANCOUVER—Federal Building, 325 Granville Street

IMMIGRATION MEDICAL SERVICE OFFICES

Canada

GANDER—Gander Airport (P.O. Box 144)

HALIFAX—Immigration Building, Pier 21

NORTH SYDNEY—Immigration Building

SAINT JOHN—Quarantine Hospital (P.O. Box 1406)

QUEBEC—Savard Park Immigration Hospital

MONTREAL—Immigration Building, 1162 St. Antoine Street

VICTORIA—Immigration Building

Overseas

LONDON—42-46 Weymouth Street, Marylebone, W.1.

THE HAGUE—Canadian Embassy

BRUSSELS—Canadian Embassy

PARIS—Canadian Embasssy

ROME—Canadian Embassy

STOCKHOLM

INDIAN HEALTH SERVICES

Hospitals

PRINCE RUPERT, B.C.—Miller Bay Indian Hospital

NANAIMO, B.C.—Nanaimo Indian Hospital

SARDIS, B.C.—Coqualeetza Indian Hospital

*CARDSTON, ALTA.—Blood Indian Hospital

GLEICHEN, ALTA.—Blackfoot Indian Hospital

EDMONTON, ALTA.—Charles Camsell Indian Hospital

FORT QU'APPELLE, SASK.—Fort Qu'Appelle Indian Hospital

NORTH BATTLEFORD, SASK.—North Battleford Indian Hospital

HODGSON, MAN.—Fisher River Indian Hospital

PINE FALLS, MAN.—Fort Alexander Indian Hospital

*SELKIRK, MAN.—Dynevov Indian Hospital

*THE PAS, MAN.—Clearwater Lake Indian Hospital

*BRANDON, MAN.—Brandon Indian Hospital

NORWAY HOUSE, MAN.—Norway House Indian Hospital

MANITOWANING, ONT.—Manitowaning Indian Hospital

MOOSE FACTORY, ONT.—Moose Factory Indian Hospital

OSHWEKEN, ONT.—Lady Willingdon Indian Hospital

SIOUX LOOKOUT, ONT.—Sioux Lookout Indian Hospital

Nursing Stations

Cape Dorset, N.W.T.
 Coppermine, N.W.T.
 Fort McPherson, N.W.T.
 Fort Norman, N.W.T.
 Lake Harbour, N.W.T.
 Bocket, Alta.
 Driftpile, Alta.
 Morley, Alta.
 Saddle Lake, Alta.
 Lac La Ronge, Sask.
 Leask, Sask.
 God's Lake, Man.
 Island Lake, Man.
 Oxford House, Man.
 Nelson House, Man.

Little Saskatchewan (Gypsumville),
 Man.
 Cross Lake, Man.
 Big Trout Lake, Ont.
 Fort William, Ont.
 Lac Seul, Ont.
 Osnaburgh House, Ont.
 Fort Chimo, Que.
 Fort George, Que.
 Bersimis, Que.
 Port Harrison, Que.
 Ruperts House, Que.
 §Perth, N.B.
 Eskasoni, N.S.

Health Centres

Sydney, N.S.
 Schubcnacadie, N.S.
 Lennox Island, P.E.I.
 Newcastle, N.B.
 Restigouche, Que.
 Seven Islands, Que.
 Caughnawaga, Que.
 Maniwaki, Que.
 Loretteville, Que.
 Barriere (seasonal)
 Notre Dame du Nord, Que.
 Amos, Que.
 Obidjiwan (seasonal)
 Mistassini (seasonal)
 Maniwan (seasonal)
 Waswanipi (seasonal)
 Point Bleue, Que.
 St. Regis, Ont.
 Deseronto, Ont.
 Muncey, Ont.
 Sarnia, Ont.
 Ohsweken, Ont.
 Christian Island, Ont.
 Chapleau, Ont.
 Port Arthur, Ont.
 Sault Ste. Marie, Ont.
 Walpole Island, Ont.
 Kenora, Ont.
 The Pas, Man.
 Sandy Bay, Man.
 Rossburn, Man.

Broadview, Sask.
 Punnichy, Sask.
 Prince Albert, Sask.
 Hobbema, Alta.
 Good Fish Lake, Alta.
 St. Paul, Alta.
 Fort St. James, B.C.
 Williams Lake, B.C.
 Kamloops, B.C.
 Hazelton, B.C.
 New Westminster, B.C.
 Duncan, B.C.
 Alert Bay, B.C.
 Kincolith, B.C.
 Port Simpson, B.C.
 Port Edward, B.C.
 Prince Rupert, B.C.
 Greenville, B.C.
 Vancouver, B.C.
 Whitehorse, Y.T.
 Carmacks (seasonal)
 Teslin (seasonal)
 Fort Smith, N.W.T.
 Fort Resolution, N.W.T.
 Fort Simpson, N.W.T.
 Aklavik, N.W.T.
 Chesterfield Inlet, N.W.T.
 Pangnirtung, N.W.T.
 Fort Rae, N.W.T.
 Coral Harbour, N.W.T.

§ Departmental hospitals staffed by religious orders on stipend.

* Departmental sanatoria, staffed and operated by the Sanatorium Board of Manitoba, with reimbursement on a per diem basis.

INDUSTRIAL HEALTH LABORATORY

· OTTAWA—200 Kent Street

LABORATORIES OF HYGIENE

OTTAWA—45 Spencer Street

KAMLOOPS, B.C.

PUBLIC HEALTH ENGINEERING DISTRICT OFFICES

MONCTON—General Motors Building

MONTREAL—1162 St. Antoine Street

ST. CATHARINES—4th floor, Dominion Building

PORT ARTHUR—Room 1, Customs Building

WINNIPEG—207 Scientific Building, 425½ Portage Avenue

EDMONTON—Room 406, Post Office Building

VANCOUVER—425 Howe Street

QUARANTINE STATIONS

HALIFAX—Rockhead Hospital

SAINT JOHN—Quarantine Hospital (P.O. Box 1406)

QUEBEC—Louise Basin and Savard Park Immigration Hospital

MONTREAL—379 Common Street

VANCOUVER—Immigration Building

VICTORIA— William Head, B.C.

SICK MARINERS CLINICS AND HOSPITALS

HALIFAX—Immigration Building, Pier 21

SYDNEY—Marine Hospital

LUNENBURG—Marine Hospital

SAINT JOHN—Quarantine Hospital

QUEBEC—Louise Basin

VANCOUVER—Immigration Building

*To the Honourable Paul Martin, K.C., P.C., M.P., M.A., LL.M., LL.D.,
Minister of National Health and Welfare, Ottawa.*

SIR,—We have the honour to present, herewith, the Annual Report of the Department of National Health and Welfare, for the fiscal year ended March 31, 1951.

Respectfully Submitted,

G. D. W. CAMERON,
*Deputy Minister of National Health
and Welfare (Health)*

G. F. DAVIDSON,
*Deputy Minister of National Health
and Welfare (Welfare)*

OTTAWA,
April 1, 1951.

FOREWORD

Notable gains were made during the year in services to strengthen and preserve the health and social welfare of the people of Canada. A number of important events occurred in both health and welfare fields and substantial progress was made in programs administered by the different divisions of the Department.

A new conception of national responsibility for the welfare of older persons was crystallized in the recommendations of the Joint Parliamentary Committee on Old Age Security and the foundation of planning was laid, through the National Conference on the Rehabilitation of Disabled Persons, for the building up of existing rehabilitation services to a point where they can provide for the needs of all disabled persons in Canada.

The progressive development of provincial health services under the National Health Program was accelerated as staff were trained and new facilities acquired. As the health surveys being carried out under the program by the provinces approached completion, the picture became increasingly clear as to the needs in different provinces that could be met through the aid of the federal grants. To complement the assistance made available for the building up of health and hospital services to serve the general population, the Department's expanding program of health care for Indians and Eskimos continued to be strengthened through the extension of both preventive and treatment services.

New approaches to the improvement of health in Canada were also begun through the Canadian Sickness Survey, which commenced during the year in all provinces. Through the survey, information will be provided on the extent and prevalence of illness in Canada which has never hitherto been available and which will be of great importance in future health planning. A number of other studies carried on in different phases of health activity will also contribute to this work and a survey of the extent of the demand for social workers in Canada, for which preparations began during the year, will materially assist the charting of progress in the welfare field.

New duties were assumed by the Department when, in February 1951, responsibility for federal civil defence functions was transferred from the Minister of National Defence to the Minister of National Health and Welfare. Organizational planning of the different health and welfare aspects of civil defence had been commenced prior to this transfer. Since responsibility for civil defence was transferred to this Department late in the fiscal year under review, the account of civil defence activities has been included in the report of the Department of National Defence.

During the year the Department continued, on request of the Department of External Affairs, to assist the work of the United Nations and its specialized agencies and other international organizations in respect of health, welfare and social security matters and to carry out various international responsibilities resulting from different conventions in the health field to which Canada has been a signatory. Departmental officers represented Canada at a variety of United Nations meetings.

The considerable expansion and strengthening during the year of services provided by the Department was achieved despite economies made necessary because of the seriousness of international conditions. The progress that has been achieved was in large part made possible by the devotion and loyalty of departmental staff and their assumption of the heavy new responsibilities that have been an inevitable part of the growth of departmental work.

HEALTH BRANCH

INTRODUCTION

Since the formation of the Department of National Health and Welfare in 1944, co-operation with Provincial departments of health and other health agencies, in the extension and development of health activities throughout the country, has assumed an increasingly important place in the work of the Health Branch. The establishment of the National Health Program in 1948 through the granting of federal funds, to assist in specific fields of health activity, has greatly extended this work and the implementation of the grants has constituted a major activity of the Department since that date. The consultative service provided through the specialist divisions to provincial departments of health and other agencies, which was begun prior to 1944, has been continued and extended as an essential part of the program.

Extension of health services to Indians and Eskimos has resulted in substantial increase in the number of patients treated. During the year a new 200-bed hospital was opened at Moose Factory together with a number of health centres in areas where health aid had previously not been available.

A sharp increase during the year in the number of immigrants requiring medical examination abroad has necessitated an expansion of the Departments' overseas staff. Medical and hospital care of sick mariners has been slightly expanded and strengthened where necessary. There has been an increasing utilization of the health services available to civil servants and growing evidence not only of the benefits derived by the civil servant from this scheme, but, also of saving through increased efficiency and decreased loss of time. Civil aviation in Canada was aided through the establishment and supervision of physical standards for pilots and general advisory work in the field of civil aviation medicine.

Inspection and enforcement work carried on in the fields of food and drugs, narcotic control and public health engineering were continued with some extension in particular areas. New problems are continually arising in this work, calling for a substantial amount of investigation and applied research.

Support continued to be given to research on the characteristics and uses of ACTH and cortisone, with the co-operation of the provinces which have allocated a portion of their share of the General Public Health Grant for this purpose. Up to the end of the fiscal year about \$335,100 had been expended for this research. In addition, under the Public Health Research Grant, \$53,657 has been made available to the Connaught Medical Research Laboratories for research on methods of preparation of ACTH.

Prior to the responsibility for civil defence being transferred to the Department work had been commenced on the different health aspects of civil defence. Responsibility for this work has been retained by the Health Branch of the Department.

Organization of the Health Branch. The Health Branch is divided into four directorates: Health Services, which is composed of a number of divisions dealing with different aspects of public health; Health Insurance Studies, which administers the National Health Grants, with assistance from the specialist divisions of the Department, and directs departmental activity in health care planning; Indian Health Services, which administers the

federal program under which medical and hospital care is provided for Indians and Eskimos; and Food and Drugs, which is responsible for the administration of the Food and Drugs and Proprietary or Patent Medicine Acts.

The Directorate of Health Services is composed of fourteen divisions, each of which is charged with responsibilities in certain fields of public health work. These include: Blindness Control, Child and Maternal Health, Civil Aviation Medicine, Civil Service Health, Dental Health, Epidemiology, Hospital Design, Industrial Health, Mental Health, Narcotic Control, Nutrition, Public Health Engineering, Quarantine, Immigration Medical and Sick Mariners, and the Laboratory of Hygiene. During the year, the Venereal Disease and Tuberculosis Control Division was incorporated into the Epidemiology Division as a logical step in view of changing concepts and trends in public health work.

A number of services are provided to the Health Branch through the different divisions of the Administration Branch which includes the Information Services and Research Divisions, the Legal Adviser and Departmental Secretary, the Departmental Library and the Personnel and Purchasing and Supply Divisions.

Health Branch Expenditure. Expenditure by the Health Branch was \$33,215,833 during the year. In addition, a proportion of the \$792,335 expended on general departmental administration was for Health Branch activity. The largest single item of Health Branch expenditure was the \$18,874,786 paid to provincial health departments under the National Health Program. The second largest single item, \$10,285,668, was expended on health services for Indians and Eskimos.

Expenditure by divisions carrying on statutory functions was \$2,540,607: of this total, \$716,635 was expended under the Food and Drugs Act, \$26,330 under the Proprietary or Patent Medicine Act, \$165,737 under the Opium and Narcotic Drugs Acts, \$262,298 under the Quarantine Act and for services to lepers, \$686,112 under the Immigration Act, \$126,092 under the Public Works Health Act and other legislation and regulations relating to Public Health Engineering, and \$557,404 for treatment of sick mariners under Part V of the Canada Shipping Act. The specialist divisions providing advisory, co-ordinating and other assistance accounted for a further \$1,250,810 and an additional \$155,050 was expended on grants to national voluntary agencies engaged in health work. Health Branch administration costs were \$108,912.

Details as to Departmental Expenditure are contained in Table 4, on page 104.

The Dominion Council of Health and Advisory Committees. During the year the Dominion Council of Health, the principal advisory body to the Minister on health matters, which is composed of representatives from the provinces and different fields related to health work, under the chairmanship of the Deputy Minister of National Health, held its 58th meeting. The major questions receiving consideration were methods by which the continuing shortage of trained health personnel, and particularly nurses, could be alleviated and problems in connection with the administration of the National Health Program and the surveys of Provincial health facilities and the nation-wide morbidity survey being conducted under the program.

Meetings were also held and a number of important recommendations made by the Canadian Council on Nutrition and the Technical Advisory Committees on Mental Health, Public Health Laboratory Services and Public Health Engineering.

II

HEALTH IN CANADA

The health of the Canadian people has been influenced by the cumulative effect of many advances in medicine and public health during the first half of this century and further improvement should result from new methods of prevention, from research in the use of new drugs, from increased facilities for the care of the sick and from other advances in both health and welfare work. Some idea of the progress that has been made, and the problems that remain to be met, is given through data which has been provided by the Dominion Bureau of Statistics. More detailed knowledge of the extent of major health problems should begin to become available on conclusion of the Canadian Morbidity Survey which is described in Part IV.

During 1950 there were no epidemics of national importance. A relatively minor form of influenza, which appeared late in 1950, reached a peak in late February and early March of 1951. Certain localities, for the most part urban centres, were chiefly involved and, with the increasing incidence of the disease, appeared to suffer to a greater extent than others.¹ There was a significant increase in the total number of deaths during this period over corresponding months in previous years, with about seventy-five per cent of the increase, according to the Dominion Bureau of Statistics, being in the age groups over 55 years.

Other less widespread epidemics, such as an outbreak in Halifax, of infectious hepatitis, occurred in different sections of the country. Increased incidence of neonatal skin infections and puerperal breast abscesses appeared to continue in several large urban centres; in one city, in 1948, 14 per cent of confined mothers were affected, as compared with the usual average incidence of as low as 0.5 per cent of confinements.

Poliomyelitis, usually considered a summer disease that is gone with the first frost, followed an unusual pattern in Prince Edward Island, where the first case occurred during the week of September 9th, and cases were reported each week until the end of January, 1951. In all, 79 cases were reported, more than two and one-half times the previous five year annual average of 30 cases for the province.

Vital Statistics

The population of Canada is estimated by the Dominion Bureau of Statistics to be just under 14 million at the present time and to have increased by about 2,000,000 persons during the ten years since 1941, with the average natural increase of about 230,000 being supplemented by a net immigration of from 50,000 to 75,000 persons each year. The rural to urban shift of population has continued since 1941, when 54 per cent of Canadians were living in urban centres.

The increase in population has been accompanied by increases in both the older and, because of high birth rates, the younger age groups. Canada, however, remains a relatively "young" nation. While the proportion of persons aged 50 years and over has increased about four per cent in the last 20 years, 37 per cent of today's population is under 20 and nearly 70 per cent under 40 years of age. Life expectancy has gradually increased as the hazards of infectious disease have been overcome and it is now estimated that boys and girls who survive their first year of life can, on the average, look forward to about 68 and 70 years of life respectively.

(1) Some indication of the attack rate is given by the fact that 59 per cent of the staff of the Department suffered varying degrees of illness from influenza during the period of its greatest intensity; in one industrial company in Ottawa where 300 persons were employed the incidence of illness was 36 per cent.

The birth rate in 1950 was 26.8 per 1000 population, as compared to 26.9 in 1949 and the post-war peak of 28.6 in 1947. Seventy-four per cent of babies were born in hospitals. The marriage rate declined to 9.0 per 1000 population from the 1946 peak of 10.9. At the same time the divorce rate increased to 37.7 per 100,000 of the population—a rate four times greater than that of 20 years ago, with the number of divorces being six times higher.

The general death rate which was 8.9 per 1000 in 1950, when 123,649 deaths occurred for all ages, has declined slightly over the past several years. In a general decline in mortality rates which is evident in most countries when rates for 1937 and 1948 are compared, Canada was one of nine countries where the decline, based on "age adjusted rates," was 20 per cent or more. In 1949 less than one third of all deaths in Canada were of persons under 50 years of age. Of these 43 per cent were under one year of age; 41 of every 1000 live births still failed to survive the first year of life.

Chief Causes of Death

It is estimated that heart or arterial diseases and defects affect at least 800,000 Canadians. Arteriosclerotic and degenerative heart diseases easily take first place amongst the chief causes of death. They caused a total of 30,533 or 24.7 per cent of all deaths in 1950. Another 6.7 per cent of deaths were due to other conditions of the heart and arteries, such as chronic rheumatic heart, hypertension and heart disease. Vascular lesions of the nervous system accounted for a further 10.1 per cent. Thus cardiovascular disorders were responsible for 41.5 per cent of all deaths during the year.

Cancer of various types caused more than 17,000 deaths and over 14 per cent of total deaths. It has been estimated that some 250 cases occur each year for each 100,000 of the population and, on this basis, there would have been 35,000 cases in Canada during 1950. Some idea of the community case load can be derived from attendance at x-ray departments of public hospitals, where more than 67,000 persons were treated in 1947, over half of whom received x-ray therapy.

Birth injuries, asphyxia and atelectasis caused 2,651 deaths; infections of the newborn, 715; other diseases of early infancy, including prematurity, 4,227 and congenital malformations 2,236—a total of 9,874 or about eight per cent of all deaths. While infant mortality rates remained high, a new low was set for Canada in 1950 by British Columbia, where the rate was 30 per 1000 births.

Encouraging progress has been made in reducing maternal mortality; the rate has declined from 5.8 maternal deaths per 1000 live births in 1930 to 1.1 in 1950.

Accidental deaths rank first among the causes of death through school age to about age 40. During 1950, motor vehicle accidents took 2,261 lives and other accidents 5,277, a total of 6 per cent of all deaths.

The respiratory diseases killed a total of 6,107 Canadians and accounted for 5 per cent of all deaths in 1950. Pneumonia was responsible for 4,633 deaths, influenza for 940, and bronchitis for 534. While, taken together, the respiratory diseases still find a place among the chief causes of death their incidence has been rapidly declining since the introduction of the sulpha drugs and antibiotics. While it is not yet possible to say that they have been controlled, their complications have been greatly reduced, with consequent decrease in the number of resultant deaths. For almost all types of respiratory diseases, except pulmonary cancer, death rates were about twice as high six years ago as now; in 1937, before the use of chemotherapy and the antibiotics, they were more than four times as high.

The long term steady downward trend in tuberculosis mortality continued. In 1950, 3,582 or three per cent of all deaths in Canada resulted from tuberculosis. Although this disease remains a major cause of illness and death and is still far too prevalent in some areas of Canada, the over-all mortality rate has decreased from 87.7 per 100,000 population in 1921 to about 22 in 1950. Mass chest x-rays have suggested an average of one to two cases per 1,000 examined. A national case load in 1950 of about 36,000 sufferers seems a reasonable estimate.

Diabetes caused 1,545 deaths in 1950, or 1.2 per cent of total deaths, with the death rate being 11.2 per 100,000 population. However, recent surveys show total diabetic prevalence to be comparable to that in the U.S. or about 1.3 per cent of the population. The favourable life expectancy of sufferers from diabetes remains a tribute to insulin and its Canadian discoverers.

Deaths from infectious and parasitic diseases, other than tuberculosis, also continued to decline; they totalled 1.479 in 1950, or one per cent of total deaths. It should be noted however that in 1950 there were 421 cases of diphtheria reported in Canada and 49 deaths from this disease, in spite of the fact that preventive measures are available.

Major Illnesses

A listing of some of the highlights of the incidence of sickness in Canada reveals both cause for encouragement and the need for further improvement.

In the last five years there has been a reduction of 82 per cent in cases of early syphilis and 46.5 per cent for other venereal diseases. In 1950, there were 22,220 cases of known disease or 160.8 per 100,000, a 13 per cent reduction from 1949. Known cases of gonorrhea decreased 8 per cent in the same period.

Poliomyelitis showed a 1950 incidence of 6.6 cases per 100,000 population, one third of whom were reported as paralytic. Rates for the previous three years, exclusive of Newfoundland, were 18.5, 9.1 and 18.2 respectively. It has been estimated that about 20,000 Canadians suffer some residual disability from this disease.

In regard to arthritis and rheumatism, which, it was estimated in 1947, affect some 625,000 persons over the age of 14, some improvement may become evident in the future as a result of the increasing availability of cortisone and ACTH.

Multiple sclerosis was the subject of considerable research during the year. A survey in the city of Winnipeg showed a local prevalence rate of 421 per 100,000—about four times that revealed in a companion survey carried out in New Orleans. Prevalence rates similar to that of Winnipeg have been discovered in two other Canadian cities. Since 1945 over 200 deaths have occurred annually from this disease.

One of the greatest health problems today is presented by mental illness. While it is difficult to assess the full extent of mental illness in the population various estimates have appeared which suggest that as high as 50 per cent of illness may be attributable to this cause.

Many more facts and figures could be quoted. For instance, it is estimated that there are 18,000 blind persons in Canada and over 100,000 who are deaf or hard of hearing—but what has been given perhaps indicates some of the highlights of a picture which, while still requiring improvement is generally very favourable when compared to any period in the past or to most other countries today.

Indian Health

Special mention should be made of progress achieved in raising the health level of Canada's Indian population.

According to a special census taken in 1949 the number of Indians in Canada was 136,047. Birth rates are high, as shown by the 1949 rate of 43.9 per 1000 population. The death rate still remains high and in 1949 was 19.6 as compared to 9.2 for the whole population. This unfavourable figure is reflected in infant mortality rates; in 1949 there were 146 deaths for each 1,000 live births, compared to the over-all rate of 43.

The greatest threat to Indian and Eskimo health remained tuberculosis. In 1949 the death rate was 399.6 per 100,000, as opposed to 26.7 for the whole population. The progress that has been made, however, is evident when this rate is considered in relation to the 549.8 of 1947 and the 480.1 of 1948. Case incidence seems to be improving as mass x-ray surveys in 1946 showed a rate of 3.28 and in 1950 a rate of 1.53 for every 100 persons exrayed. Mass B.C.G. vaccination campaigns now underway may be expected to show some impact on tuberculosis.

III

INTERNATIONAL HEALTH ACTIVITIES

An important part of the Department's work arises from obligations incurred in connection with contractual agreements between Canada and other countries on matters related to health, and with Canada's membership in international organizations concerned with health work.

Canada has been a signatory to a number of international agreements and conventions specifically relating to health. To carry out this country's obligations under the International Sanitary Conventions, the Department maintains quarantine measures for ships and aircraft entering Canadian ports and provides accommodation and necessary medical care for persons arriving in Canada who require to be quarantined. In addition, it carries out Canada's obligations, under the Brussels Agreement of 1924, for the provision of treatment for venereal disease in seafarers arriving in this country. The Department is also responsible for the enforcement of requirements governing the handling and shipping of shellfish, under the International Shellfish Agreement between Canada and the United States, and, at the request of the International Joint Commission, participates in studies connected with control of pollution of boundary waters between Canada and the United States and with problems caused by atmospheric pollution.

Other international health responsibilities carried out by the Department include the custody and distribution of biological, vitamin and hormone standards for the World Health Organization, certain duties in connection with the Commission on Narcotic Drugs of the United Nations and the provision of assistance to a number of the specialized agencies carrying out programs having aspects relating to health, including the International Civil Aviation Organization and the International Refugee Organization.

In addition to Canada's contribution toward the expenses of the World Health Organization substantial financial contributions were made to the United Nations Technical Assistance Fund and to the International children's Emergency Fund.

World Health Organization. In 1946 Canada was the third country to ratify the constitution of the World Health Organization and, until the organization was formally established in 1948, served as a member nation on the 18-member Interim Commission which worked out the details of its organization.

At meetings of the World Health Assembly, the Organization's main governing body, on which all member states are represented, Canadian delegations have supported a policy of gradual and orderly development of international health activities, and have emphasized the importance of establishing priorities and designing programs to meet the most urgent of world health problems in a manner which will encourage and sustain maximum local effort. Canadian delegations to the annual meetings of the Assembly have included provincial as well as federal health officials and in addition distinguished authorities outside the government service.

International Medical Congresses. During the year more than 30 invitations were extended to the Department to be represented at international congresses dealing with various medical and related sciences. As the Department regards these meetings as valuable primarily for the opportunity they provide for leading clinical and research scientists in different countries to meet and exchange information, invitations are generally referred to appropriate professional or other organizations or to individuals, with a view to securing effective representation in each case. In a few instances, where members of the Department can make special contributions or where attendance would be particularly valuable to the Department's work, departmental officials attended. During the year officers of the Department attended the Mid-century White House Conference on Children and Youth; the third Assembly of the World Federation of Mental Health, the second International Congress on Criminology, and the International Congress of Psychiatrists, all held in Paris in September 1950; the Sixth International Conference on Radiology; the annual meeting of the Pan-American Association of Ophthalmology; and the Symposium held in Washington, on Current Progress and Study of Venereal Disease.

IV

ASSISTANCE AND PLANNING SERVICES

The provision of assistance and guidance to the many agencies engaged in health activity in Canada has become an increasingly important part of the work of the Department. Through the provision of financial aid and expert technical assistance, the Department comes into direct relation with almost every part of the nation-wide system of health services administered by provincial and municipal departments of health. In a similar way very close relationships exist between the Department and many of the national voluntary health agencies. To supplement this work a program is maintained in the field of health education, with informational material being prepared as requested by the provinces and made available for distribution through provincial departments of health. The Department has also contributed substantially to research carried on in the socio-economic aspects of health matters.

THE NATIONAL HEALTH PROGRAM

The National Health Program, under which annual federal grants are made to the provinces to strengthen and extend health and hospital services and to lay the foundations for health insurance, has three basic purposes: to assist the provinces in surveying their health facilities and services, to aid with the cost of new hospital construction over a period of years and, through annual grants, to improve and strengthen provincial services in the various health fields. The different grants which constitute the program, which is administered by the Directorate of Health Insurance Studies, and the conditions under which each is made available, are shown in Table 1, pages 23 and 24.

TABLE 1

CONDITIONS GOVERNING FEDERAL GRANTS AVAILABLE TO PROVINCES UNDER THE NATIONAL HEALTH PROGRAM, 1950-51(a)

GRANT	Health Survey	General Public Health	Tuberculosis	Mental Health	Venereal Disease	Crippled Children
Purpose of Grant	Survey of Provincial health resources to determine existing needs and priority with which they should be met and to assist planning of an integrated program of development and extension	Strengthening and extending provincial and local health services, including training of personnel and conduct of surveys and studies.	Prevention and treatment of tuberculosis, including rehabilitation and extension of free treatment, training of personnel and conduct of surveys and studies.	Prevention and treatment of mental illness, including rehabilitation, extension of free treatment, training of personnel and conduct of surveys and studies.	Prevention and treatment of venereal disease, including rehabilitation, training of personnel and conduct of surveys and studies.	Prevention and treatment of crippling conditions in children, including rehabilitation and training, training of personnel and conduct of surveys and studies.
Basis of Allocation to Provinces	\$5000 to each province with the balance being allocated on the basis of population, subject to no province receiving less than \$15,000.	45 cents per capita (b)	\$25,000 to each province with balance allocated 50 percent on basis of population and 50 per cent on basis of average number of deaths from tuberculosis in each province in previous five years.	\$25,000 to each province with balance allocated on basis of population.	\$4,000 to each province with balance allocated on basis of population.	\$4,000 to each province with balance allocated on basis of population.
Matching Conditions	Nil	Nil	Nil	Nil	50-50 basis.	Nil
Remarks	Non-recurring grant totaling \$625,000 first made available in 1948. Additional \$20,180 to Newfoundland brought grant total to \$645,180. Unexpended portion in any year has been made available in the next.	Grant commenced at rate of 35 cents per capita and increases 5 cents per capita annually to a maximum of 50 cents per capita.	Grant was increased by \$1,049,386 at the commencement of the third year of the program.	Grant is increased by \$1,033,929 at the beginning of the third, fifth and seventh years of the program.		

(a) As from 1951-52 a province may, under certain conditions and without exceeding its total allotment, utilize any unexpended funds from one grant to supplement another that has been fully expended.

(b) Increased to maximum of 50 cents per capita in 1951-52.

TABLE 1 (Contd.)
CONDITIONS UNDER WHICH FEDERAL GRANTS WERE MADE AVAILABLE TO PROVINCES UNDER THE NATIONAL HEALTH PROGRAM, 1950-51

GRANT	Cancer	Professional Training	Public Health Research	Hospital Construction
Purpose of Grant	Detection and treatment of cancer, including diagnosis, treatment and rehabilitation, training of personnel and conduct of surveys and studies.	Training of health and hospital personnel.	Stimulation and development of public health research.	Provision of adequate accommodation for hospital and health services.
Basis of Allocation to Provinces	Allocated on basis of population.	\$4,000 to each province with balance allocated on basis of population.	As approved by the Minister, on recommendation of the Dominion Council of Health.	Allocated to provinces on basis of population. Allocated to hospitals: \$1,000 per bed for active treatment beds; \$1,500 per bed for chronic or convalescent beds; \$1,000 for 3 bassinets each contained in a separate cubicle; \$1,000 for each 300 square feet of space in a community health centre, subject to prescribed maximum limits on amount of space for which grant may be utilized.(c)
Matching Conditions	50-50 basis.	Nil	Nil	Provinces to match or exceed federal contribution, which in no case shall exceed one third of total cost.
Remarks		Grant is used generally for the training of hospital personnel; personnel in other health fields are trained under other grants. Two or more provinces may combine in a training project.	Grant commenced at \$100,000 and increases annually until maximum of \$512,900 is reached. Two or more provinces may combine in a research project.	Grant was commenced with the intention that its progress be reviewed at the end of five years, with a view to any adjustment in the program found to be required at that time.

(c) For 1951-52 the grant was also made available on the basis of \$500 per bed for living quarters for nurses and, subject to prescribed maximum limits on amount of space for which grant may be utilized, \$1,000 for each 300 square feet of space in a laboratory.

The grants have been utilized for the development of all aspects of provincial health programs. In all provinces surveys of existing health facilities and services have been made possible, so that gaps might be uncovered and future progress charted. By the end of the fiscal year federal aid had assisted in the construction of 28,355 new hospital beds, over half the objective aimed for during the first five years of the program. Some 3,700 health workers have received special training and 3,400 workers have been employed through the grants to strengthen provincial health departments, institutional staffs, hospitals and local health services. Provincial and municipal health facilities have been aided by the purchase of additional technical equipment and the extension of both preventive and treatment services and a significant increase in health research has been made possible.

During the three years that the program has been in existence the provinces have steadily increased their utilization of the amounts made available through the grants. While the most difficult obstacle to full utilization, apart from rising costs, has been shortage of trained staff, the number of persons for whom training has been made available through the program has contributed substantially toward reducing this problem. The progressive increase in the use of grant funds is illustrated by the fact that while in the first year of the program the provinces were able to utilize only 25.8 per cent of the funds available under all grants (excluding the Health Survey Grant) this percentage rose to 47.3 in 1949-50 and to 53.1 in 1950-51. Further substantial increases are contemplated as a result of the completion of training courses now being carried on with aid from the grants and through the increased flexibility which it has been possible to introduce, as the program has progressed, into the conditions under which the grants are paid. The amounts made available to the provinces in 1950-51, the amounts allocated for approved projects and the amounts actually expended during the year are shown in Table 2, page 26.

Although the extension of preventive work has been evident in all provinces, together with an increasing interest in such projects as the development of Community Health Centres, most of the extension and increase of activity has been marked by a considerable variation between provinces in the manner in which development has taken place, because of differing needs and different provincial administrative methods. This variation has afforded an opportunity to study and assess the different ways in which the grants have been used. Equally important opportunities for study are afforded by the different pioneering projects being carried on, which, while established to meet problems that were particularly pressing in particular provinces, provide extremely useful experience for study and adaptation by other provinces. Special mention is made here of a number of these projects, which are considered to be of interest because of the influence they may be expected to exert on future health planning.

Table 2

AMOUNTS ALLOCATED TO, APPROVED FOR EXPENDITURE
AND EXPENDED BY, PROVINCES UNDER FEDERAL GRANTS
OF THE NATIONAL HEALTH PROGRAM, 1950-51

GRANT	A M O U N T		
	Available for Allocation to Provinces	Approved for Expenditure by the Provinces	Expended by the Provinces
	\$	\$	\$
General Public Health	6,086,300 ^(a)	3,966,412	2,907,730
Tuberculosis	4,226,000	3,854,849	3,166,166
Mental Health	5,156,100	3,422,301	2,644,827
Venereal Disease	516,300	516,199	484,165
Crippled Children	516,300	377,712	243,503
Cancer	3,592,600	1,766,018	1,693,106
Professional Training	516,300	509,056	452,853
Public Health Research	308,000 ^(b)	275,655	231,234
Hospital Construction	14,343,800 ^(c)	12,640,315	6,897,353
Total	35,261,700 ^(d)	27,328,517	18,720,936
Health Survey (revote)	365,663 ^(e)	300,259	153,850
Grand Total	35,627,363	27,628,776	18,874,786

(a) \$6,910,500 in 1951-52

(b) \$410,700 in 1951-52

(c) Including \$1,000,000 revoted from previous year.

(d) \$35,188,600 in 1951-52

(e) \$645,180 originally voted, less expenditures to March 31, 1950

In Newfoundland, for instance, the extension and improvement, through the grants, of the completely combined public health and medical services which had for some years been provided throughout most of the province by the provincial Department of Public Health has assisted the development of a program which is of considerable interest to other provinces, particularly those in which health care must be supplied for sparsely settled areas. Similarly, the development in Prince Edward Island of a combined laboratory service, operated by the provincial department of health through the hospitals and providing both public health laboratory service and hospital diagnostic procedures, is a project that will be closely watched.

A significant project, though a small one, being carried out by the Herbert Reddy Memorial Hospital in Montreal, is designed to ascertain the advantages of the hospital providing supervision in the patient's own home, as opposed to actual accommodation in the hospital. Studies such as this might conceivably point to a greater economy in the use of hospital accommodation in Canada.

In the essential work of training health personnel a number of extremely interesting projects are being carried on. One of the most important has been the successful program established in 1948-49 at Dalhousie University, under which the four Atlantic provinces co-operate in the training of psychiatrists, psychiatric social workers and public health nurses.

In the field of mental health, assistance has been given to the new Crease Clinic at Essondale, British Columbia, for the investigation and intensive psychiatric treatment of mental patients, one of the outstanding developments in mental health work on the continent. As a part of the over-all social study being carried on in Digby county in Nova Scotia mental health clinical services are being developed by the province, through the aid of the Mental Health Grant. In addition to the important information as to the effect of environment on mental breakdown that, it is expected, will be derived from the study, the province will be provided with an exceptionally well established clinic. Another interesting development has been the provision of occupational and recreational facilities in provincial mental hospitals. The programs being developed by the Rehabilitation Department of the British Columbia Mental Health Services and the Provincial Mental Hospital in London, Ontario, under which rehabilitation services are provided for discharged mental patients, are also of great interest.

Another extremely important project has been the child health centre established to provide complete health services for all children in the Greater Vancouver Metropolitan Health District, which will also be available to aid children from other parts of the Province.

Assistance has also been given to the two experiments being carried on in Ontario to ascertain whether courses for nurses might be shortened so that greater numbers may be trained with available facilities. The 26-month course at Metropolitan Hospital in Windsor has now been in operation long enough so that some evaluation is becoming possible of the results obtained. The revised three-year training course at the Toronto Western Hospital, where all academic work is concentrated in the first two years, followed by a year as a nurse intern, so that full-time nursing service is provided after a two year training period, is another project of great potential interest.

Finally, experience gained in the attempt in Saskatchewan to provide dental care for children in rural areas, using the health region as the basis for service, should be of great interest to other provinces in planning how best to provide comprehensive dental services for children.

These projects represent, of course, only a very limited number of the total being carried on under the program, a total which is too large to list in detail in this report. Mention of representative projects is made however in the following pages, under the different health services of which they are a part.

General Health Services

In addition to its work in specific health fields the Department carries on an active program designed to assist the development of the general administration of health and hospital services. Grants are made to a number of national voluntary agencies providing generalized programs, such as the Red Cross Society, the Victorian Order of Nurses and the Health League of Canada. In addition the General Public Health Grant is used for such projects as the building up of provincial health organizations and local services as well as to assist programs in various special fields, as described in other parts of this report.

Administrative services have been aided in a number of different ways; perhaps the most important has been the assistance given to the building up of staffs and the provision of facilities in all provinces. Medical health officers, public health nurses, administrators, clerical workers—all types of administrative staff—have been employed through the grant. In Quebec, for example, the total number of health workers has been increased by over 21 per cent since the commencement of the program and such projects as the health inspection service established on the west coast of Newfoundland have been made possible.

Health planning has been materially assisted in many provinces. New Brunswick has established a Health Planning Services Division, Prince Edward Island a Health Planning Commission. In Saskatchewan the Health Planning Services Division is aided by the grant. In Saskatchewan and other provinces vital and hospital statistics and other statistical services have been enlarged and extended with grant aid.

In all provinces hospitals have been assisted through the purchase of equipment and the employment of staff. Other aids to hospital administration range all the way from the organization of a Division of Hospitals in New Brunswick to the appointment in Newfoundland of a medical officer trained in public health to assist cottage hospital doctors.

Municipal doctor and hospital plans have been aided. In Saskatchewan, the number of communities providing doctors' services on a co-operative basis has been increased to more than one hundred and a supervisor of municipal doctor plans has been appointed to co-ordinate and standardize the program. The same trend has been evident in other prairie provinces.

In the strengthening of local health activity there has been significant progress in the establishment and building up of health units and in providing services to areas where care was formerly not available, as on the south coast of Newfoundland. With the aid of the grant, the provinces have greatly increased the number of, and expanded the services provided by health units.

In the over-all development of local health facilities very considerable attention has been paid in all provinces to the establishment and extension of laboratories and diagnostic units. In Manitoba particularly emphasis has been placed on this work and laboratory and x-ray services have been extended through the provinces' diagnostic units by assistance in procuring additional staff and equipment.

This brief mention of different ways in which the basic framework of health services in the provinces has been built up with assistance from the grant makes no pretense of being all inclusive, or of including mention of all ways in which aid has been provided. It does, though, give some idea of the variety of manners in which generalized services have been developed to complement the expansion of programs in the different health fields that are described in the following pages.

Child and Maternal Health and Crippled Children

Technical assistance in the fields of child and maternal health and crippled children is provided through the Child and Maternal Health Division in co-operation with a number of other divisions of the Department. Financial aid to provincial programs is made available through different grants of the National Health Program. Educational work is carried on through the production of films, radio scripts, pamphlets, articles for publication and other media. The Department acts in a liaison capacity with the World Health Organization and as a clearing house for information for the national voluntary agencies, educational centres, medical schools and other organizations active in child and maternal health work.

Grants for Child and Maternal Health Work. — Substantial aid has been given to child and maternal work under the National Health Program. During the year support was continued, through the General Public Health Grant, for a number of activities previously commenced, and for a number of new projects. The grant is used in child and maternal health work by different provinces principally for the establishment and support of child and maternal health divisions and services, the training of staff, the expansion of school health services, the purchase of equipment and the carrying on of research.

The child and maternal health divisions previously established in Saskatchewan and New Brunswick continued to receive aid and a division was established in Quebec city. In Quebec, assistance was given to the establishment of a pilot clinic for pre-natal and post-natal care at l'Hopital Ste. Justine and a complete program for the immunization by BCG of all newborn infants has been commenced. Manitoba and Alberta completed the furnishing of all hospitals in the province with incubators.

Federal assistance has made possible the strengthening of school health services in every province. In Quebec, school health services in many areas have been assisted by the provision of special equipment and by the addition of staff. Aid was continued to the special child health program in seven schools under the jurisdiction of the School Board at Lachine, and medical examinations of approximately 1,700 pupils are now carried out at periodic intervals. In Ontario, physicians have been employed by various health units, to carry out medical examination of pre-school and school children. A preventive Orthodontia service is operated in Toronto, under the direction of the Department of Public Health, to provide orthodontic examination, education and simpler forms of corrective dental service for school children. In six provinces, audiometric tests were provided to locate children who are handicapped by defective hearing, so that corrective steps may be taken where indicated.

A number of research projects are also being carried out. British Columbia has been assisted in a project designed to evaluate the use of the Wetzell grid in relating the physical development of children to the state of their health. Other research includes studies of the effect of early rising after childbirth and of possible factors accounting for mis-

carriage, of nutritional abnormalities in pregnancy, of staphylococcal infection of mothers and infants and of the clinical use of "haptens" in the prevention of disease in newborn infants.

Grants for Crippled Children's Work. — With the aid of the Crippled Children Grant, all provinces are intensifying programs for the prevention and correction of disabling conditions in children and for the training of disabled children, through the building up of modern diagnostic services, and evaluation, treatment and rehabilitation facilities for children who are disabled by accident, disease or inherited defect. The principle governing administration of the grant is that every disabled child should be given the complete care that is necessary to cure his disabling condition or to alleviate it so far as possible.

Though the pattern of development has not been the same in all provinces and some provinces have concentrated on building up government services, others on the provision of assistance through voluntary agencies, the grant has been used for the rounding out and development of the programs which existed in different provinces prior to its commencement and for the establishment of entirely new programs. In most provinces emphasis has been placed on the setting up of registries for crippled children and the development of systematic programs of diagnosis, treatment and rehabilitation. In many, special attention has been paid to cerebral palsy.

In Manitoba, the grant has been used for the development of a program for the location, registration and treatment for disabled children. In addition, a teaching program is being developed and operated at the Children's Hospital, Winnipeg. In Saskatchewan, assistance has been given to a section within the Division of Child Health to provide services for crippled children, which include a register of all crippled children in the province and a systematic program of diagnosis, treatment and rehabilitation. The grants have helped defray the operating costs of the Cerebral Palsy Rehabilitation Centre in the Red Cross Hospital, Regina, and a mobile consultation unit has been established to care for crippled children in the smaller centres of the province. Professional training has been provided and in Regina, a brace shop has been established to make orthopaedic appliances. A central registry to record all children in British Columbia suffering from crippling diseases has been established with the aid of the grant, as a basic step in the provincial program for crippled children. Staff and orthopaedic equipment have been provided to the Health Centre for Children in Vancouver, and for the care of children, to the Western Society for Physical Rehabilitation.

In some provinces substantial aid has been given to the Crippled children's Societies and the Red Cross for the provision of services on a province wide basis. In Prince Edward Island, federal funds have been allocated to the Canadian Red Cross Society for the carrying on of a treatment and rehabilitation program. In New Brunswick, the Junior Red Cross has been assisted in the provision of free treatment for crippled children, including hospital costs, fees to surgeons and anaesthetists, and the purchase of corrective and therapeutic appliances and equipment. The Ontario Society for Crippled Children has been aided in expanding its various nursing districts and for the extension of services to northern centres of the province. In Quebec, the provincial Society for Crippled Children and the Rehabilitation Society for Cripples have been assisted in the employment of essential new staff and for necessary equipment.

In most provinces existing facilities have been bolstered by the purchase of equipment and the employment of staff. In Newfoundland, equipment has been purchased for the orthopaedic wing of the General Hospital in St. John's and staff have been employed for work with crippled children. In Nova Scotia, respirators have been purchased for the province's polio clinic and equipment to improve teaching methods in the Children's Hospital in Halifax. The Ecole Cardinal-Villeneuve in Quebec city has been assisted by the employment of staff, and the provision of ambulance and other equipment for transportation of crippled children to and from treatment centres. Orthopaedic appliances have been purchased for different crippled children's programs, and assistance has been given for the extension of services by the Speech Therapy Clinic at the Royal Victoria Hospital.

Some provinces have utilized grant funds for the organization of programs against specific disabling conditions. Alberta is establishing a program providing treatment, appliances and rehabilitation for crippled children not covered by the Alberta Poliomyelitis Sufferers' Act and funds have been provided for an experimental diagnostic and treatment service for persons under 21 years of age suffering from rheumatoid arthritis. Assistance has also been given to the establishment of a Cerebral Palsy diagnostic and treatment clinic at Edmonton.

In Ontario, financial assistance has been given to the setting up of the Woodedden Hospital Training School for children suffering from cerebral palsy operated by the Ontario Society for Crippled Children, and provision has been made for similar training at a day clinic in Chatham. At the Cerebral Palsy Training School and Clinic in Toronto, staff has been employed and additional equipment has been purchased through the grant, and assistance has been given toward the payment of consultants' fees. A survey of crippling conditions in children is being conducted in Toronto with the assistance of the grant and studies are being carried out on the incidence and causes of harelip and cleft palate.

Educational and Information Services. In the production and distribution of educational material the Department maintains close co-operation with the provinces, with particular attention being paid to preparing material designed to meet provincial needs. The *Canadian Mother and Child* continued to be distributed on request, at the rate of about 10,000 copies a month, a number closely corresponding to the number of first births registered annually in Canada. The book, which is intended primarily for use in outlying districts where medical care is not readily available, is constantly being revised to meet new concepts of the care which mothers and children should receive. *Up the Years from One to Six*, which was published during the year, was prepared through the collaboration of departmental specialists in pediatrics, psychiatry, nutrition, dental health, blindness and physical fitness as well as non-government experts. Dealing with the physical characteristics and behaviour of pre-school children, it has been well received and the first edition of 55,000 copies fell far short of the demand. A companion volume *Up the Years from Six to Twelve* is now in course of preparation. The film *Mother and Child*, and the fifteen minute filmstrips *Nine to Get Ready* and *Introducing Baby* have continued to be widely used. Columbia University has requested permission to adapt the former for showing in the United States.

The various folders and other informational material provided by the Department have continued to be circulated. This material which is revised from time to time to meet new developments in the various fields of care includes folders on *Whooping Cough* and *Poliomyelitis*, of which 60,000 and 47,000 copies respectively were distributed during the year;

the card *Daily Diet for Mothers*, which is intended as a reminder concerning the main essentials of diet for expectant and nursing mothers, of which 58,000 copies were distributed; and the folder *Ten Points to Remember*, which is intended for distribution at showings of the film *Mother and Child* and film strips. In addition to this work, addresses and lectures were given to different groups and articles were prepared for publication in *Canada's Health and Welfare* and other journals. During the year articles on whooping cough and breast feeding appeared in the departmental publication.

Research and Assistance Projects. The Department continued to assist in the Wetzel Grid Study, carried out by the British Columbia Department of Health, of 8,000 school children in the Central Vancouver Island Health Unit. The study, which will help to determine the usefulness of the Wetzel Grid in assessing the growth and development of children, has been carried on over a period of two years with assistance from federal grants, and the final report is in course of preparation. The Department has also participated in research on prematurity, carried out in Vancouver, under which information, including all factors which may have affected premature births, is being collected in respect to births in four Vancouver hospitals. A report covering this research was presented at the annual meeting of the Canadian Public Health Association in Toronto.

Considerable assistance was also given by the Child and Maternal Health Division to the British Columbia Department of Health in the organization of a program for premature babies and to that of Saskatchewan in the development of the program of the new Child Health Division.

Epidemiology

The term epidemiology is used by the Department in its broadest sense, to include critical evaluation of problems in the field of communicable and chronic disease and the implementation of programs for prevention and control.

Departmental epidemiological activity, which is centred in the Epidemiology division, includes the provision of planning, leadership in and co-ordination of epidemiological programs in Canada and the rendering of assistance to provincial health departments as required in the event of epidemics of unusual size or importance. Continuous investigation and assessment of new methods for the prevention and control of disease are carried on. In the conduct of laboratory and field studies the division acts in conjunction with the Laboratory of Hygiene or other government or non-government agencies, to determine the incidence and prevalence of disease or other significant information related to disease problems. Collaboration is maintained with the Dominion Bureau of Statistics in improvement of morbidity and mortality reporting and co-operation extended to the World Health Organization and other countries in the development of international programs and the exchange of epidemiological information.

Considerable assistance has been given to provincial epidemiology programs through the General Public Health, Public Health Research and other grants of the National Health Program. There has been great variation in the types of projects receiving assistance. Some, which might be considered as representative are listed here.

With the assistance of the General Public Health Grant, a Division of Communicable Disease Control has been established in the New Brunswick Department of Public Health, and, under the Public Health Research Grant, a number of research projects have been carried out in different provinces.

In Quebec, a study is being made of the epidemiology of virus diseases, of neurotropic viruses and of the history of histoplasmosis. Saskatchewan is being assisted in a survey of disseminated sclerosis being carried on in the southern part of the province and Alberta in a study of systemic fungi of the province and in an aerobiological survey of pollen and mold spores.

Aid is being given to a number of epidemiological studies being carried on in Ontario, including survey to determine the incidence of diabetes, the incidence and distribution of Cercarial Dermatitis and the incidence of diphtheria carriers among school children. Other projects in the province receiving assistance include: epidemiological studies of trichinosis; aetiological studies, including a study of rheumatic fever and rheumatoid arthritis; a study of non-bacterial pneumonias in infants, to determine the proportion of respiratory infections which may be due to viral agents; and a survey of clinical ocular diseases of virus aetiology. A study is being made of the role of sewage and water supplies in the spread of poliomyelitis and a brucellosis survey is being carried on in Brant County. In the sickness survey of families in East York—Leaside, carried out by the local health unit during the last two years with assistance from the Public Health Grant, and completed on March 31, 1951, technical assistance services continued to be provided by the Epidemiology division.

Major projects of the Epidemiology division during the year included participation with the Directorate of Health Insurance Studies, the Research Division, the Dominion Bureau of Statistics and provincial health departments in the development of the Canadian Sickness Survey and of the supplementary survey of permanent disability carried out in conjunction with it. The division played an important part in the rendering of epidemic aid assistance to the provinces and in the carrying out of field studies. The division acts as a centre for the dissemination of epidemiological information in answering current requests. During the course of widespread epidemics, such as the influenza epidemic of the past winter, the division worked in conjunction with the Influenza Centre established in the Laboratory of Hygiene.

Assistance was given to the Manitoba Department of Health and Public Welfare, in November 1950, in response to a request that an epidemiological study be carried out of an epidemic in Winnipeg of Staphylococcus Aureus Hemolyticus infection causing pustules in newborn infants and infected breasts in mothers. The epidemic had run a fluctuating course in most city hospitals since the fall of 1948 and, at its peak, incidence of breast infections involved as many as 10-15 per cent of mothers confined in Winnipeg hospitals. Infection was first thought to be caused by one strain of staphylococcus Aureus, but later evidence appeared to indicate association with more than one strain. Improvements in nursing techniques and nursery conditions seem to have played a major part in reducing pustular infections of infants. Aureomycin, used prophylactically was found to be an effective treatment for breast and infant infections for a period of about one year. However, resistance eventually developed to it and chloromycetin was effectively substituted. Although periods of normal levels of incidence, about 0.5 per cent of confinements, have occurred in Winnipeg hospitals, these infections are still running a fluctuating course. A project has been approved, under the Public Health Research Grant for a special study of the epidemiology of this infection.

Mental Health

Administration of the Mental Health Grant, the carrying on of an active education program, the provision of consultant services to other federal departments and of advisory and co-ordinating services for provincial health departments and other mental health agencies, are the principal aspects of the Department's mental health program.

Grants. The Mental Health Grant has been used by the provinces largely to provide additional staff for mental hospitals, mental health clinics and psychiatric wards in general hospitals; for the purchase of equipment; for the training of mental health workers; and for research in the field of mental health. The provinces contributed a portion of their grant funds for the production, by the National Film Board, of a public education film on mental hospital work.

In all provinces much progress has been made in the development of preventive services. Prince Edward Island and New Brunswick are organizing divisions of mental health which will operate mental health clinics along with other services. In Newfoundland the activities of the mental health clinic attached to the St. John's General Hospital have been expanded and the whole service strengthened by the addition of a psychiatrist to the staff of the hospital for nervous and mental diseases. In Nova Scotia, two field psychiatric clinics have been established, based at Sydney and Yarmouth, to provide a consultative service to physicians, and assistance to schools, courts, welfare agencies and institutions. Another clinic is being established, with the aid of the grant, in the north-western area of the province, to undertake research in preventive psychiatry as well as to provide usual mental health clinic services. In addition, a staff of psychologists has been employed, through the grant, to assist the various mental institutions and provide assistance in the public schools, with special emphasis on the proper treatment and testing of sub-normal children and children with behaviour problems.

The grant has been utilized to set up mental health clinics in many areas of Quebec and Ontario. In Quebec, assistance was given to various voluntary agencies, to child guidance clinics at Laval University, the University of Montreal and at Three Rivers and Sherbrooke. A clinic for discharged adult prisoners and juvenile delinquents is being organized in the Quebec City area.

In Ontario, clinics have been set up to serve York township and the municipalities of Windsor and Sudbury, and services in Hamilton, London and Toronto have been extended with grant funds. In Manitoba, two child guidance clinics were organized. Saskatchewan used the grant to strengthen the staffs of existing mental health clinics in various areas; a new clinic was established in Saskatoon and five teacher-psychologists were employed for the school mental health program. In Alberta, a clinic was established for adults as well as children. A preventive mental health program was commenced in the Victoria area of British Columbia and three child guidance clinics in other areas of the province, including one travelling unit, were assisted.

With the assistance of the grant, outpatient psychiatric clinics were set up at the general hospitals in St. John's, Halifax, and Saint John. Quebec is establishing psychiatric clinics in six hospitals in the Quebec city area and in seven in the Montreal area. In Ontario and the prairie provinces psychiatric outpatient services are being expanded. Outpatient clinics for epileptics in Quebec and Montreal are being extended. In British Columbia an outpatient clinic for epileptics is being established at the Vancouver General Hospital.

A number of provinces employed the grant to improve services for the mentally retarded. In Nova Scotia it was used to staff and equip an extension of the hospital for mental defectives. Quebec, Manitoba, Saskatchewan, and Alberta enlarged and improved services for mental defectives through increases of staff and purchases of equipment. In Ontario, a pilot plant training centre for mentally retarded children has been established in Toronto.

In every province large amounts have been spent on the purchase of special technical equipment required for newly-developed diagnostic and treatment services, including electroencephalographs for the diagnosis of organic brain disorders, apparatus for shock therapy and equipment for lobotomy and leucotomy. Comprehensive programs of occupational and recreational therapy have been developed in the mental hospitals of several provinces. One of the largest single projects in institutional care has been the development of the Crease Clinic of Psychological Medicine at Essondale.

British Columbia has undertaken a post-discharge rehabilitation service. During the year a rehabilitation officer was appointed to provide guidance and employment services for patients discharged from the Essondale Mental Hospital. The organization on a demonstration basis of an after-care department at the Ontario Hospital, London, Ontario, to assist with the post-convalescence and rehabilitation of mentally ill persons was another major development during the year.

A widespread program of research and investigation in various fields of mental health is being carried on, with the aid of the grant, at various Canadian universities and institutes. It includes laboratory studies dealing with organic factors in mental illness, clinical studies concerned with the psychiatric aspects of specific illnesses, socio-economic research into social factors, and psychological projects such as the standardization of intelligence tests.

Advisory and Consultant Services. At its annual meeting in January 1951 the Advisory Committee on Mental Health, which consists of representatives of the Department and of the medical schools and the directors of provincial mental health services, recommended that five per cent of the Mental Health Grant be centrally allocated for the support of research in the mental health field and that action be taken by the National Research Council, the Defence Research Board and the Department of Veterans Affairs to delineate clearly the various aspects of the field of mental health research which each undertakes to support; that consultants in the fields of nursing, social work, and rehabilitation be appointed to the staff of the Mental Health Division; that a statement of minimal training for attendants and nurses be prepared by the Department to permit uniform certification throughout Canada; and that the Department sponsor a film on the psychiatric aspects of the problem of chronic alcoholism.

At an interdepartmental meeting to consider the problem of psychiatric research, called by the Department in June 1950 and attended by representatives of the Departments of National Health and Welfare, Justice, Citizenship and Immigration, Labour and Veterans Affairs and the National Research Council and Defence Research Board, the possibilities of federal support of a major institute for research into mental disease were explored.

The consultant service on mental health problems provided by the Division of Mental Health to the Narcotic Control and other Divisions was continued.

Information Services. Child training pamphlets produced by the Department continue to be popular with public health personnel and social workers, as well as parents. The production of two new pamphlets, on *Shyness*, and *Baby Talk*, brought to twelve the total of those now published in this series. A new series on the *School Age Child* was instituted in 1950, with one pamphlet, *Preparing Your Child for School*, being published.

The fourth film of the Mental Mechanisms Series, *Feelings of Depression*, was released early in 1950. With the three previously produced, *Over-dependency*, *Feeling of Rejection*, and *Feeling of Hostility*, this film was shown at the International Congress on Psychiatry in Paris, 1950. The second film of the Child Development series. *The Terrible Twos and Trusting Threes* was released in 1950. The first film, *He Acts His Age*, released in 1949 has been widely shown; these two films were also exhibited at the International Congress. A third film in the Child Development Series is now being made.

The sales of prints of the film, *Rejection*, in the Mental Mechanisms series, set a record for print sales of any film produced by the National Film Board.

A display in poster form was prepared for the Department by the Canadian Exhibition Commission, for exhibition at the World Federation for Mental Health and International Congress of Psychiatry meetings. This display, which depicts the problem of mental health in Canada, and the uses to which the Mental Health Grant has been put, will be available for future use in exhibitions and meetings in Canada.

Tuberculosis

The departmental campaign against tuberculosis is built round the Tuberculosis Control Grant of the National Health Program and, in case of Indians and Eskimos, the far-reaching program being developed by the Directorate of Indian Health Services described in Section V of this Report. Additionally, a substantial grant is made to assist the Canadian Tuberculosis Association to carry on its work on a national basis. The federal grant program has three basic objectives; the development of adequate case finding facilities in all areas of Canada, the provision of treatment measures capable of meeting the needs of every patient and the organization of necessary rehabilitation services to assist the return of patients to normal living following treatment of the disease.

Preventive and Case Finding Services. In most provinces case finding services have been greatly expanded through the establishment of both mobile and stationary clinics and the general extension of x-ray examinations and surveys. Federal funds have been extensively utilized for the purchase of x-ray equipment and for the training of physicians and of technicians to be engaged in the operation of x-ray, laboratory and clinical services.

Mass detection services were assisted in all provinces, with special attention being given to hospital admission x-ray examination programs and the x-raying on a regular basis of industrial groups. In some provinces the routine hospital admission x-ray examination is given to practically all persons admitted to hospitals of all types. As an example of a novel procedure in the detection program, a four-month seaborne x-ray survey was successfully undertaken in Newfoundland.

In the field of prevention assistance has been given to all provinces for the purchase of B.C.G. Federal funds were used in Quebec in the development of a large scale program of B.C.G. immunization of infants.

The vaccine is available to all children born in Quebec hospitals, with babies born in the home being vaccinated when attended by public health nurses.

Treatment. Sanatorium accommodation for tuberculous patients has been greatly increased through the Hospital Construction Grant, and free treatment of tuberculosis has been progressively extended. Since the initiation of the National Health Program federal funds have assisted the construction of over 3,000 beds in institutions in practically all provinces and in all provinces funds have been used for the purchase of sanatorium equipment and the training and employment of personnel. Particular emphasis has been placed on the extension and improvement of surgical facilities and the training of chest surgeons.

Before the federal grant became available streptomycin was reserved for the most urgent cases and in many instances could not be provided without charge. The grant has been utilized in all provinces for it to be provided free for patients who might benefit from its use, with the drugs P.A.S. and T.B.1. also being made available but on a somewhat less extensive basis.

Rehabilitation. The establishment and expansion of rehabilitation services designed especially for tuberculosis patients has been stimulated by the grant in most provinces. Programs which have been developed include vocational counselling and vocational training, given, usually in the sanatorium, as well as placement, guidance and assistance services.

Rehabilitation officers have been appointed in certain provinces, either to provincial divisions of tuberculosis control or to provincial tuberculosis associations. Existing services have been expanded through the employment of vocational instructors and the purchase of equipment and new programs were established in a number of the provinces as an initial step towards fulfilling the need in this important aspect of the over-all control effort.

Research. The developing program of tuberculosis control has stimulated a number of research studies, investigations and surveys designed to improve preventive and treatment methods. A number of studies were commenced on the different aspects of preparation and the immunizing effects of B.C.G. vaccine and other important work is being done in research on the most effective use of P.A.S. and streptomycin and on how the effectiveness of various diagnostic procedures may be improved.

Venereal Disease

In venereal disease work the Department assists the provinces through the Venereal Disease Control Grant and provides leadership, particularly in regard to the planning of services and the co-ordination and integration of a national program, in consultation with government and non-government agencies actively engaged against venereal disease. Continuing close liaison is maintained with national and other voluntary organizations and with the Venereal Disease Control Division of the World Health Organization.

In both federal and provincial programs emphasis is placed on the same fundamentals applicable to all communicable disease; the provision of adequate diagnostic and treatment facilities, case finding, public education, investigation of the problem in particular localities and repression of the individual and environment responsible for the spread of disease. In accordance with approved control procedures, combined federal and provincial efforts have been directed mainly in support of such major projects as the provision of free diagnostic and treatment facilities, the

supply of free penicillin, the payment of fees to physicians for diagnostic and treatment services, and the training of personnel and the purchase of equipment. Emphasis has also been placed on the extension and improvement of laboratory services, epidemiological and educational activities and research.

Federal financial assistance to the provinces has been particularly marked in the field of venereal disease, where a matching grant was first instituted in 1919 and, except for a period in the middle and late thirties, has since been made available each year; on commencement of the National Health Program the amount of the grant was more than doubled.

In the different provinces the grant has been used in a number of different ways: in all provinces however it has been utilized to extend and expand pre-existing services so that a completely developed program will be possible. All provinces have been able to utilize practically the full amount of the grant available to them; in a number of provinces provincial expenditure considerably exceeds that required by the matching provisions of the federal grant.

During the year the Department concluded the review of syphilis records for service personnel in the second World War which was commenced in 1946 when demobilization had been virtually completed. It is believed that the permanent register of summarized histories prepared contains the greater proportion of all service cases diagnosed as syphilis during the period of hostilities. It will be used for reference purposes, and information can be made available in response to requests from practising physicians and provincial health departments. The Quarterly Statistical Report on Venereal Disease in Canada, which has now been prepared for five years from incidence figures reported by provincial health departments to the Dominion Bureau of Statistics, was continued, to provide an indication of progress and developing trends in venereal disease work.

In response to the need for a useful technical manual dealing with venereal disease and incorporating, for the practising physician and medical student, the most recent advances in therapy in this field, the manual *Syphilis and Gonorrhea* was completed during the year. The popular lay informational booklet, *VD What You Should Know* was also reprinted and is being made available for use by the Armed Forces as well as civilians.

With a view to the preparation of plans to cope with eventualities arising from the international situation, steps were taken during the year to re-institute the local liaison meetings between civilian and Service venereal disease control authorities. Interest and full co-operation in this aspect of venereal disease work have been extended by all concerned.

Cancer

Departmental activities against cancer include administration of the Cancer Control Grant to the provinces, close co-operation with and assistance to the National Cancer Institute, and operation of the Canadian Tumour Registry.

Through the Cancer Control Grant, assistance is given to the provinces for the training of health personnel, the employment of staff for cancer work, the equipment of clinics, the purchase of radium and the provision of treatment services. With its aid provincial registries of cancer patients have been organized and programs of public education spon-

sored. Training has been given to physicians in cancer treatment and detection work and to technicians in x-ray and other therapeutic measures. All provinces have joined with the federal government in contributing a portion of the grant to the National Cancer Institute, for the carrying on of research.

The free treatment program provided by Saskatchewan and the substantial Alberta program of diagnostic medical and hospital services, treatment for old age pensioners and educational and preventive care have been materially assisted.

In Newfoundland, cancer services for the island are being developed, with the aid of the grant, at the General Hospital in St. John's where a tumour clinic and radiotherapy treatment section are being established. Tissue examinations for cancer patients are provided through the provincial laboratory. During the year, more than 1,300 persons received free therapeutic treatment.

Prince Edward Island has used the grant to organize a Cancer Control Division within the Department of Health, to provide a two-year training course for its director and refresher courses for other staff. Diagnostic clinics have been established at Charlottetown and Summerside, and provincial laboratories have been assisted to improve cancer diagnostic services.

Substantial aid has been given to Victoria General Hospital in Halifax, around which cancer control work in Nova Scotia is centred. X-ray equipment has been purchased for the clinic through the grant and the Pathological Institute has been assisted in improving laboratory cancer diagnostic services.

In New Brunswick, the grant has been used to assist the provincial plan for the extension of diagnostic services and for the provision of free treatment by radium, and x-ray therapy and limited hospitalization for diagnosis and treatment. The province has received assistance in establishing and supporting a cancer control division and a cancer advisory committee of medical specialists. A number of physicians have received training for cancer control work; therapeutic equipment has been purchased for hospitals, and federal funds have been allocated for the purchase of radium.

Quebec has been assisted in establishing clinics in a number of the principal hospitals in the province. The grant has also been used in aid of the Cancer Institute of Laval University, the Montreal Cancer Institute and the Radium Institute of Montreal. McGill University is being assisted, through the General Public Health Grant, in the conduct of a pilot study for the development and application of statistical procedures in cancer control, in an attempt to improve Cancer mortality and mortality statistics.

In Ontario, assistance has been provided to the Ontario Cancer Treatment and Research Foundation for the operation of the two cancer clinics it maintains and the eight regional clinics it supports. The grant has been used to assist in providing free biopsy service for cancer and suspected cancer cases and to aid in providing hospital care and treatment.

In Manitoba, assistance has been given to the Manitoba Cancer Institute to carry on the provincial program which includes diagnosis, extension of biopsy service without charge to all physicians in hospitals having no pathological services of their own, establishment of master diagnostic clinics at the Winnipeg and St. Boniface hospitals, provision

of x-ray therapy and of radium and the maintenance of a register of all cancer patients.

The British Columbia Cancer Institute has been assisted in its program under which consultative, diagnostic and radio therapeutic services are provided, together with free biopsies and cytology services. The grant is being used by the province for the purchase of diagnostic and therapeutic equipment for general hospitals, for the diagnosis and treatment of cancer, to assist the Cancer Institute in the operation of a nursing home, and for training of staff employed on cancer work.

Arthritis and Rheumatism

Work against arthritis and rheumatism has been substantially advanced by a number of projects undertaken by the provinces with federal aid. Through the General Public Health Grant the provinces have provided material assistance to the extensive program being developed by the Canadian Arthritis and Rheumatism Society.

Nova Scotia is being assisted in the establishing of a treatment program and in New Brunswick an outpatient clinic for arthritic patients has been organized. In Quebec the provincial government is being assisted with the building of a 200 bed arthritis unit at the Hotel-Dieu de Montreal and with the training of personnel to staff it. In Ontario a number of projects of the Canadian Arthritis and Rheumatism Society have been supported and equipment has been purchased for eight clinics located in the principal centres of the province. In Manitoba, clinics have been assisted in Winnipeg and St. Boniface, and long-term hospitalization provided for special cases. In Manitoba support has been given to the Society's program under which clinics will function at Winnipeg and St. Boniface and hospitalization will be provided together with social, rehabilitation and physiotherapy services. In Saskatchewan, a professional director was employed through the grant for the provincial branch of the Society and a 12-bed experimental inpatient treatment unit has been assisted in Regina; assistance has been given to the Arthritis Centre at Victoria Hospital, Prince Albert, and to the Society's home care and follow-up program. In British Columbia aid was given to the provincial Division of the Society for the employment of staff and the establishment of clinics.

Substantial support has been given to a large scale research program for the investigation of the characteristics and uses of ACTH and Cortisone, for which the provinces have allocated part of their share of the General Public Health Grant to the National Research Council. To supplement this program funds have been made available under the Public Health Research Grant, to the Connaught Medical Research Laboratories for the development of a pilot plant for the production of ACTH from pituitary glands collected at Canadian abbatoirs.

Poliomyelitis

In a number of provinces existing services for poliomyelitis have been extended through the National Health Program; in all provinces assistance to services for crippled children has increased the aid available to children suffering from poliomyelitis.

Specific poliomyelitis programs which have been assisted include the already substantial Alberta program which has been expanded,

through aid from the grants, to provide treatment, appliances and rehabilitation for all poliomyelitis cases in the province. In British Columbia the services provided through the Western Society for Physical Rehabilitation have been aided. Nova Scotia has purchased respirators for the use of patients in the poliomyelitis clinic at Halifax and a federal grant has assisted in the construction of a new 70 bed poliomyelitis wing at the Victoria General Hospital in Fredericton, the centre for treatment in New Brunswick.

In Ontario an investigation of the role of sewage and water supplies in the spread of poliomyelitis, at the Connaught Medical Research Laboratories, is being financed through the Public Health Research Grant and studies are being carried on in the Hospital for Sick Children at Toronto with a view to improving methods of treatment during the recovery stage.

Dental Health

In dental health work, attention is concentrated on broadening the field of preventive dentistry by reducing the prevalence of dental caries, irregular teeth and periodontal disease, with a view to improvement of general health. The Department makes financial aid available to provincial dental health programs through the National Health Program, provides consultant and advisory services to the provincial health departments and to the Canadian Dental Association, and carries on research and educational work in the field of dental health. Close liaison is maintained between the Department and the Canadian dental profession. The Chief of the Dental Health Division acts in an advisory capacity to the Board of Governors of the Canadian Dental Association and to the Association's committees on Public Health and Health Insurance. The Research Committee of the Association, in turn, advises the Department on technical matters relating to dental drugs and remedies.

Grants. Considerable aid has been given to provincial dental services through the General Public Health Grant. During the past three years seven of the nine existing provincial dental health divisions have been established with assistance from the grant and all provinces have utilized it to develop and extend preventive dental services, usually with special emphasis on services for children. Mobile dental clinics have been established, and the number of stationary establishments has been increased; dental services have been improved in many sanatoria and mental hospitals; dentists, dental assistants and nurses have been employed and many dental personnel have been enabled to undertake training in public health.

In Newfoundland, with the aid of the grant, preventive dental services have been initiated with the establishment of a public health dental clinic at the St. John's General Hospital. In the other three Maritime provinces, provincial divisions of dental hygiene have been established with federal grants being used to provide essential supplies and equipment. Nova Scotia has been assisted to organize two dental clinics in rural areas, and New Brunswick to enlarge dental clinics at Saint John and to purchase equipment for a new dental public health laboratory.

In Ontario, mobile preventive dental services have been organized in a number of health units and federal funds used to equip a railway coach travelling dental clinic for children living in remote communities where no dental services exist; its itinerary involves about 25,000 miles of travelling during each year. A new preventive orthodontic service has been established in Toronto with assistance from the grant. In Manitoba, a mobile preventive dental clinic for rural school children has been set up

and assistance given to a school dental health service for the children of Winnipeg. Through use of the grant, Saskatchewan has organized a dental hygiene division and has established preventive dental treatment programs in several regions; Alberta has improved dental services for children in Calgary. British Columbia has established a division of preventive dentistry. Dental clinics for rural areas are being established, and dental directors have been appointed to local health units. Two dental clinics have been inaugurated as part of the dental hygiene program for the Vancouver area, to provide preventive dental services for pre-school and grade one children, with the federal government sharing the cost.

Research and Surveys. The Brantford Water Fluoridation Caries Study being carried out by the Dental Health Division in cooperation with provincial and municipal health departments, with statistical assistance from the Research Division, was continued and, during the year, was extended to include an epidemiological study of gingival conditions among school children and young adults. In this study, the teeth and gums of 1,800 children in Brantford, where the public water supply is being artificially fluoridated, are being compared with those of 1,800 children in Sarnia, who serve as a fluorine-free control group, and with 1,800 children in Stratford where the water has an optimum natural fluoride content. Examinations conducted during the year include those of the 1,800 children in Brantford and Sarnia, as well as of over 200 young adults of Stratford. Consultive service on certain technical aspects of this work was obtained from the Associate Committee on Dental Research of the National Research Council and advice was obtained from members of university faculties of dentistry.

To assist in determining the place and value in an industrial health service of dental preventive services a pilot model dental preventive service was commenced through which prophylactic and counselling services are given to a group of civil servants. The project, which is carried on by a dental hygienist working under the supervision of a dentist, who also provides diagnostic services where indicated, is operated by the Dental Health Division, working in close co-operation with the Civil Service Health and Nutrition Divisions. To facilitate the referral of patients for emergency and other dental treatments, a working arrangement has been made with the Ottawa Dental Society. It is proposed to operate the pilot model service for a year or two to determine its place and its value in an industrial health service.

In conjunction with the Nutrition Division, the Dental Health Division participated in several local surveys, and in a Canada-wide nutrition study of Indian children which served to obtain data on the dental health of children in various parts of Canada. Oral examinations were also made of the patients in the optic atrophy study being carried on by the Department.

Other research has included studies of the relationship between bacterial flora of the mouth and dental caries and of the relationship between dental disease and general health.

Education and Information Services. To further the cause of prevention, dental health education material was prepared in the form of booklets, folders, posters, films and filmstrips, for use in schools, health units, industrial plants, and private dental offices. Informational material was designed to advise the public concerning the most effective methods of preventing and controlling dental disease, particularly among children, and stressed that less than one per cent of people escape tooth decay and that more teeth are being lost after age thirty from periodontal disease

than from decay. Taking into consideration the impossibility of estimating the number of people suffering from infected teeth, alveolar abscesses, pyorrhoea, lack of masticating powers and personal disfigurement, the Department has sought to make Canadians realize that only through regular early dental care of the child can dental disease among adults be brought within controllable limits, and diseases related to dental infection and deficiency be avoided.

Other Activities. Other dental health activities carried on by the Department included inspection and enforcement services in connection with the formulae of dental drugs and dentifrices and with the marketing of dental remedies, under the provisions of the Patent or Proprietary Medicines Act; control of the use of narcotics in the private practice of dentistry; and the provision of dental health services for Indians.

Blindness

Departmental activity for the preservation of vision, carried on through the Blindness Control Division, includes the encouragement of research into the causes and cure of blindness, the dissemination of information for the preservation of vision in persons of all ages and the supervision of oculists' examinations for blind pensions. Assistance is given to provincial programs through the National Health Program and grants are made to a number of organizations active in work for the blind.

During the year considerable attention was paid to work in connection with the establishment of glaucoma research and treatment clinics through the General Public Health Grant. Following the establishment the previous year of the first of these clinics at the Toronto General Hospital, two additional clinics have been organized. The first, at St. Sacrement Hospital in Quebec, is operated in connection with the Medical School of Laval University, the second, at the Hotel-Dieu in Montreal, is affiliated with the Medical School of the University of Montreal.

Two research projects in Ontario which had commenced the previous year under the Public Health Research Grant were continued, one at the Sick Children's Hospital in Toronto where causes of blindness in children and methods of testing are being investigated, the other in Hamilton where a study of vision testing in the schools is being carried out by the city Department of Health. The University of Alberta was assisted in an experiment designed to assess the need for specialist and oculist services in schools. Saskatchewan was aided in the purchase of equipment for the examination of school children's vision.

In the experimental remedial treatment program for blind pensioners being conducted by the Department, in conjunction with the provinces of Nova Scotia, New Brunswick and Quebec, under which cost of treatment is defrayed on a 75-25 per cent basis by the federal and provincial governments, the number of operations for cataracts was increased and successful restoration of useful vision continued to be achieved in 50 per cent of cases treated.

During the past two years a study has been carried on by the Nutrition Division of hereditary optic atrophy in the Ottawa, Montreal and Pembroke areas, through the clinical epidemiological study of approximately 270 families where a predisposition to blindness exists on the male side.

Publicity continued to be directed toward the preservation of vision and the prevention of blindness. A blindness control supplement was

published in the November, 1950 issue of Canada's Health and Welfare, a new pamphlet in the Child Training Series entitled "Eye Trouble" was published and a number of articles were prepared, including "Colour Vision in Industry", for the Industrial Health Review.

Continuing study was given to major blindness prevention problems, including shortages of oculists in comparison to the numbers required if visual needs are to be met, the lack of eye hospitals in Canada, shortages of beds for eye patients, and the need for travelling eye clinics to service rural areas. As it is estimated that nearly half of all cases of blindness could be prevented by adequate treatment and that useful vision could be restored to at least 12 per cent of those now blind, the great need for increased work in the field of blindness is self-evident.

In connection with the administration of Pensions for the Blind, in which the Blindness Control Division co-operates with the Old Age Pensions Division and which is described under the report on the Welfare Branch of the Department, oculists were sent round the coast of Newfoundland and to Gaspé and the Magdalen Islands during the summer of 1950, to examine applicants for pension.

In some rural areas, generally where no local facilities existed for the proper testing of vision and supplying of eye glasses, there was a rise in the percentage of rejection for pension because of conditions that could be remedied by proper eye glasses. The Canadian National Institute for the Blind continued to supply eye glasses in cases where persons could not afford them, at cost or, when necessary, free of charge.

As in previous years the Department has worked in close co-operation with and supported the activities of the Canadian National Institute for the Blind and other agencies providing services for blind persons.

Nutrition

Nutrition work in Canada is carried on by federal, provincial and municipal governments, though no nationally organized program exists. As food consumption is far above starvation levels, as average figures fail to indicate the scattered undernutrition that does exist and as improvement can more easily be effected through educational work than through case finding, programs are generally of an informational and research nature, supplemented by direct action toward certain groups and cases.

The nutritional work of the Department, which is centred in the Nutrition Division, includes assistance to provincial nutritional programs through the General Public Health Grant of the National Health Program; the provision of information and educational services; the carrying on of surveys and the conduct of research designed to define nutritional problems so that they may be more easily solved; and the supply of information, for which Canada is obligated as a contractual member, to international agencies such as the World Health and Food and Agriculture Organizations.

Grants. During the year nutritional services were expanded in five provinces through aid received under the General Public Health Grant. A Nutrition Division was established in Nova Scotia and additional nutritionists were employed in Nova Scotia and Manitoba, where a consultative nutritionist service has been established in Winnipeg. In Saskatchewan three regional nutritionists and a nutritional consultant have been employed for work in child welfare institutions and foster homes and nutritional education programs were expanded in Nova Scotia, Ontario and British Columbia.

Information and Education Services. Most of the nutritional publications produced in Canada are prepared by the Department; over 1,000,000 copies were provided during the year for distribution through provincial health departments. Most of these were revisions of publication that have been used for some years, though some new filmstrips were produced. Information is directed toward all the principal groups with which the nutritionist works, including mothers, school children, industrial workers, kitchen help and institutionalized persons; in addition much of this material has been found useful in the classroom. Nutritional materials were also prepared for use with Indian Health Services, for distribution with Family Allowance cheques, for use as a part of the department's industrial health and child and maternal health programs, and for news and radio releases. A series of kitchen books for lumber camp cooks was also prepared; such specialized items, especially when produced at the request of an industry, have been put on sale by the King's Printer.

Consultation Services. Consultation services provided by the Nutrition Division included examination of some 90 civil servants referred for nutritional problems by the Civil Service Health Division, the preparation of low sugar control diets in connection with the Department's dental health program and of diets for athletes in connection with the physical fitness program. Advice on kitchen designs was provided to the Hospital Design Division and a continuous consultation service was provided to Indian Health Services hospitals and nursing stations.

During the year the Department was appointed as consultant to the Nautical Services Division of the Department of Transport for the training and certification of ship's cooks, as required by the International Labour Organization. Services to the Northwest Territories Council included development of a Bannock mix, containing 10 per cent skim milk powder for the diet of Eskimos; storage and field tests of this mix were carried on in the North. Recipes of high nutritional value were developed for use in Indian schools and for institutions generally. Prior to the annual convention of home economics graduates, a course attended by 78 graduates was given by the Nutrition Division. Information and advice on nutritional problems was supplied to correspondents and lectures and reports were given at numerous provincial and technical meetings and at a number of universities in Canada and the United States.

Research. Research carried on by the Nutrition Division during the year included compilations such as the Table of Food Values, a socio-economic and nutritional study of blindness in a particular group in the Ottawa Valley, the carrying on of a nutrition survey and four different feeding projects in Indian Residential Schools.

The Table of Food Values Recommended for Use in Canada was first issued in 1946 because no compilation of Canadian information on this subject existed. Even now only some of the figures are strictly Canadian. A special design for this booklet was developed and much new information was obtained on weights and measures of foodstuffs. A complete revision was carried out during the year and calorie values were recalculated in terms of the new factors recommended by the Food and Agriculture Organization.

The blindness study is a preliminary survey intended to serve as a basis from which further research might be developed. About half the 260 family units surveyed were visited, and extensive laboratory, as well as clinical studies, were carried out on over 200 persons.

Only one nutrition survey was carried on during the year, the study of a typical county in southwestern Ontario, carried out in the Elgin-St.

Thomas Health Unit. Such surveys, the most extensive work of this type now being done in Canada, are carried on as a co-operative effort by the federal, provincial and local governments and serve to stimulate interest in nutrition and health generally. At the same time, by screening a group for nutritional defects, they assist in estimating the extent of malnutrition existing in Canada. If carried out in areas selected as being typical of the country as a whole, as recommended by the Canadian Council on Nutrition, such surveys would provide a comprehensive over-all picture of nutritional conditions in Canada.

In the four feeding projects being carried on in Indian Schools information is being sought as to the effect on health resulting from alteration of existing diets by doubling present low consumption of milk, by using flour "enriched" to United States standards, by the use of vitamin C tablets and by educational procedures. Controls of several kinds are being used: school against school, tablet against placebo, and pupil against self at a later time. Owing to the difficulties inherent in accurate evaluations of such observations, the project is planned to continue for 5 years from its commencement in 1948. In various phases it has involved assistance from the Dental Health Division, the Laboratory of Hygiene, the Food and Drug Laboratories, Indian Health Services, the Research Division, and the Indian Affairs Branch, as well as the Nutrition Division and the staff and students of the schools.

Other small research projects, especially in connection with laboratory diagnosis of different aspects of malnutrition, have been carried on during the year.

Industrial Health

The Department, through its Industrial Health Division, attempts to give leadership and assistance in all phases of occupational health work. Through close co-operation with the provinces, some of which administer their own programs while others provide few or no services, the Department endeavours to promote better health services and to improve working conditions in both industrial and non-industrial occupations. In addition, technical aid is provided to a number of federal agencies, including crown companies, on occupational health matters. Industrial health activities fall into four main groups: assistance to provincial programs, made available through the National Health Program; medical and nursing consultative services; laboratory services, including research and field surveys; and educational and technical information services.

Grants. Through the General Public Health Grant assistance was given during the year to the province of Quebec for the reorganization and expansion of the provincial Division of Industrial Hygiene. In Ontario scientific equipment was purchased through the grant for two projects, for a travelling unit to provide x-ray examinations for industrial workers exposed to silica dust, and for investigation by the provincial Division of Industrial Hygiene of health hazards arising from radioactive materials, silica and aluma. In New Brunswick, federal aid was utilized to assist in setting up an industrial hygiene laboratory. A number of projects designed to promote the health of workers were also carried out through the Public Health Research Grant.

Surveys and Research. During the year major activities of the Industrial Health Division included the carrying out of a number of surveys and studies and new and enlarged laboratory facilities were completed to permit fuller application of post-war scientific advances in the study of health problems originating in different work environments. This modern

laboratory, combined with the clinical facilities available through the Division, provides a complementary scientific and medical service available for specialist assistance to provincial departments of health, federal agencies and, in some cases, to industry.

In co-operation with the Newfoundland Department of Health a preliminary health survey was made, in June 1950, of industry in that province. Data were collected from plants engaged in mining, manufacturing, and storage, and from laundry and dry cleaning establishments. Of 158 plants of eligible size, 44.3 per cent were surveyed.

A preliminary industrial health survey of the National Film Board premises, including the collection and analysis of air samples for carbon tetrachloride at different locations, was carried out by the Division in September 1950. A preliminary survey of the working environment of the National Research Council was made during October, November and December. Potential health hazards were discussed and recommendations for their control together with a suggested plan for the provision of medical services were included in the survey report.

At the request of Canadian Arsenals a plan for providing medical services in each of the company's plants was prepared. The plan, which was designed to meet immediate needs and to make provision for easy expansion in the event of material increase in the number of plant employees, was subsequently implemented and the Industrial Health Division is continuing to act in a specialist consultant capacity to the crown company in all phases of industrial hygiene.

Because many of the new organic insecticides have been found to be highly toxic to man, and because of the necessary exposure to them of primary producer, formulator and applicator and the resulting danger in working environments, whether in factory, field or orchard, a toxicology laboratory has been equipped to evaluate the health hazards of new chemicals, with particular attention to new insecticides. This service, combined with clinical medical appraisal, was made available to the Department of Agriculture on frequent occasions during the year.

To combat the potentially harmful agents to Canadian industry inherent in the increased use of x-rays and other types of radiation the Division's new Health Radiation Laboratory has been equipped with the most advanced instruments for assessing health hazards resulting from exposure to x-ray and radioactive isotopes. The division has taken over from the Chalk River Project the gamma ray monitoring film service for universities, hospitals and other users of radioactive isotopes.

Efforts being made to control smoke and other air contaminants have been lent urgency by the Donora incident. In the past year a consulting service has been provided to the Northwest Territories Council, in connection with problems in safe arsenic disposal from mines, and the division is actively engaged in assisting the International Joint Commission in a long term investigation of air pollution problems in the Windsor-Detroit area.

Consultation Services. The division acted in a consultative capacity on industrial health matters to the armed forces when requested and assistance was given on a number of occasions concerning problems in service establishments. Consultant services in industrial nursing were provided for industrial nurses, management, universities carrying on nurse education programs and professional nursing organizations. Several provinces were visited in the course of this work, to foster activities that

would assist the upgrading of nursing services in industry and the integration of industrial health nursing with the over-all health program.

Information Services. Professional personnel concerned with the health of workers, management, and labour groups were kept informed of developments in established procedures for maintaining a safe and healthful working environment, through the monthly "Industrial Health Bulletin" and informational material was also circulated on new conditions, processes and materials which may affect health. Two issues were distributed in 1950 of the Industrial Health Review, which is prepared for industrial physicians and nurses, industrial chemists and engineers and others engaged in the field of occupational health and serves as a medium for the interchange of views on industrial health matters. Technical assistance and information were provided in answer to many requests received from governmental and industrial sources on such subjects as ventilation, lighting, hazardous chemicals and working conditions generally, as well as for toxicological data on various substances. In addition, benefits to be derived from a comprehensive health program in industry were outlined to professional and industrial audiences on a number of occasions, and addresses and papers on special subjects or studies relating to the field of occupational health were prepared.

Hospital Design and Construction

The Department has taken an active part in assisting hospital construction in Canada through the provision of assistance to provinces under the Hospital Construction Grant of the National Health Program and through assistance in the design and planning of hospitals, made available through the Hospital Design Division.

Grants. At the commencement of the National Health Program in 1948 shortage of hospital accommodation was one of the most urgent problems which had to be met. Under the Hospital Construction Grant, which makes over \$13 million available to the provinces each year for the building of new hospital accommodation, a five year objective was set in which it was hoped that 40,000 new beds would be obtained. From the commencement of the grant to the end of the fiscal year, federal aid has already been provided for 28,355 beds in new hospitals or additions to existing hospitals and hospitals have been established for the first time in 120 communities. Of the beds constructed with federal aid, some 16,931 have been provided in general hospitals, 3,215 in chronic and convalescent hospitals, 4,684 in mental and 3,525 in tuberculosis hospitals. During the year 90 new hospital construction plans submitted by the provinces were approved. Federal grants are also made toward the construction of community health centres in which hospital accommodation is provided together with preventive and treatment services; arrangements were made during the year for the conditions governing the distribution of the grant to be broadened so that, commencing in 1951-52, federal aid could also be made available for the construction of nursing quarters and laboratory space.

Besides being of material assistance to hospital construction throughout the country the grant has contributed to the raising of the general standard of hospital design as, to be eligible for assistance, a construction project must conform to the minimum standards which have been set by the Department after consultation with provincial health departments and leading hospital authorities.

In addition to aid to hospitals under the Hospital Construction Grant, very extensive assistance has also been extended under other grants of

the National Health Program, both for the purchase of equipment and for the training of hospital staffs.

Consultation Services. Because of the extremely complicated nature of modern hospital design, the large expenditures involved in hospital construction and the need for economical and functional planning, the importance of the Department's advisory role in the field of hospital construction has grown progressively as the Hospital Construction Program has developed. Architects, hospital administrators and hospital governing bodies have turned increasingly to the Department's Hospital Design Division for assistance with planning and construction programs. Because of the large number of hospital plans collected in connection with the administration of the Hospital Construction Grant the division now possesses the largest library of hospital plans in Canada. Experience gained in the administration of the program has led to its playing an important role as a clearing house and advisory agency on the different questions connected with hospital construction, including problems connected with construction materials and equipment, methods whereby staff work may be conserved through efficient location of facilities, and with new developments in construction designed to meet advances in medical knowledge.

Training of Health Workers

Because of the grave nature of the problems raised through shortages of trained health workers of all kinds a large proportion of the amounts made available through the National Health Program has been utilized for the training of personnel. Some 3,700 persons including all types of health workers have received training through the program since its inception; during the year 2,015 persons received training, as shown in Table 3, page 50.

The grants have been utilized by the provinces for the provision of bursaries to persons selected by the provinces, and for the subsidizing of courses and other educational facilities for the training of health workers provided by universities, research institutes, hospitals and other institutions. Refresher courses and on-the-job training in places where useful experience might be gained have also been supported.

Persons receiving training under the program must undertake to accept suitable employment offered by the province on its completion.

Training has been given in a wide range of professional fields. Persons receiving training include psychiatrists, cancer specialists, chest surgeons, radiologists, x-ray therapists and physicians seeking diplomas in public health. Bursaries have been awarded to nurses for training in public health, maternity service in remote areas, teaching and supervision, public health administration, and for special work in such different fields as mental illness, tuberculosis, and venereal disease. Sanitary inspectors, industrial hygiene workers, health statisticians, laboratory and x-ray technicians, therapists and public health veterinarians are but some of the many types of health workers that have benefitted through the program.

In view of the acute shortage of nurses, special consideration has been given to their training and, in addition to the provision of bursaries and other special training facilities, assistance has been provided to the two experiments in accelerated training being carried on at the Metropolitan Hospital in Windsor and the Western Hospital in Toronto. In addition, to overcome shortages caused by lack of training facilities in the Atlantic provinces, the General Public Health Grant has been utilized to create the

Table 3. NUMBER OF HEALTH WORKERS WHO RECEIVED
TRAINING UNDER THE NATIONAL HEALTH PROGRAM, 1950-51

Mental Health Personnel	311
Psychiatrists	86
Psychologists	114
Mental Health nurses	58
Psychiatric Social Workers	53
Other medical personnel	251
Public Health	36
Radiologists	26
Pathologists	10
Other	179
Dentists	15
Nurses	625
Teachers and supervisors	159
Public health	318
Other	148
Other public health personnel	813
Sanitary engineers	7
Sanitary Inspectors	55
Veterinarians	23
Therapists	8
Technicians	113
Health educators	52
Nutritionists	13
Social Workers	27
Other hospital personnel	515
TOTAL	<u>2,015</u>

co-operative training project supported by the four Atlantic provinces at Dalhousie University, where public health personnel including nurses have been trained. Aid has also been given to the training of practical or assistant nurses through courses established at Fort William, Montreal and other places, and through assistance given the provincial training scheme for nurses' aides in Alberta.

Training has also been accentuated in the over-all mental health program to alleviate the serious shortage of experienced personnel in that field. Under the Atlantic provinces' joint training plan psychiatrists and psychiatric social workers are being trained at Dalhousie University. Laval University, the University of Montreal and McGill University have been enabled to extend facilities for training psychiatrists, psychiatric social workers and psychiatric nurses. At the University of Toronto, federal grants have assisted a large program for the training of psychiatrists, psychologists, psychiatric social workers and psychiatric nurses. A post-graduate training course for psychiatrists and clinical psychologists has been organized at the University of Western Ontario. The University of Manitoba has extended its facilities for the training of psychiatrists and clinical psychologists, and psychiatric social workers are being trained at the University of British Columbia.

Public Health Education

The various activities of the Department in the field of public health information have been mentioned in other places in this report. The complete report of this work, which is carried on through the Information Services Division of the Department, is contained in the section describing the activities of that Division.

In addition to the assistance rendered directly to the provinces in this field by the preparation of material for distribution through provincial departments of health, considerable aid has been given to provincial health education programs through the General Public Health Grant, under which health educators have been trained and employed in most provinces, and equipment and films purchased.

Some ways in which the grant has been used include the establishment in Newfoundland of a Health Education Division, the expansion of the Saskatchewan Health Education Division, by the employment of instructors to give instruction on public health education in Normal Schools and by purchase of motion picture equipment, the strengthening of the British Columbia Public Health Education Division, and of programs carried on in Vancouver and Victoria by employment of staff and equipment, and the provision of assistance to Quebec in providing training and in school health at the University of Montreal for school teachers.

Public Health Research

Different research projects being carried on within the Department, or which have been supported through the National Health Program are mentioned in various sections of this report. Research is carried on within the Department as required by different departmental service programs and in all cases arises from the requirements of this work.

Research of a scientific and technical nature is carried on by the laboratories and by a small number of other Divisions. Although a number of different divisions also carry on research of a socio-economic nature in different areas of public health work this type of research is generally centred in the Research Division. Activities of the Research Division are described in the Administration Branch Section of this report.

Public Health Laboratory Services

One of the major Departmental activities in the field of laboratory services during the year was the survey, by officers of the Laboratory of Hygiene, of public health and hospital laboratory services at the request of provincial governments. Interest in this work developed during the previous year, when the first request for a survey was received from New Brunswick. During the past year a survey in Saskatchewan was undertaken and two other provinces have requested similar assistance. These investigations have pointed out many weaknesses in existing methods of providing accurate diagnostic aids to medical practitioners. Problems such as the shortage of qualified professional laboratory personnel have been particularly noticeable and questions connected with the training and competency of technicians are being studied. To assist in the solution of problems disclosed by the surveys a fully equipped biochemical laboratory has been established in co-operation with the Ottawa Civic Hospital, for study of procedures used in Canadian hospitals.

Assistance to provincial laboratory services has also been provided through the General Public Health Grant. New branch laboratories have been built and equipped in several provinces with the help of the grant; an outstanding development was the establishment of a Department of Virology at the University of Montreal. In all provinces, laboratory services were extended through the purchase of new equipment and the employment of skilled technical personnel; through the grant, senior bacteriologists were employed by the public health laboratories of four provinces; Newfoundland, Prince Edward Island, Manitoba and British Columbia. The training of laboratory personnel has been an important continuing feature of the use of the Professional Training Grant.

Virus work has been particularly active. Because of concern caused by the occurrence of epidemic influenza in Europe a Canadian Influenza Centre was established in the Laboratory of Hygiene to act as a co-ordinating agent with the World Health Organization, to co-ordinate activities in Canada and to serve as a clearing house for the collection and distribution of information. An improved container for the shipment of frozen specimens was designed and supplied to provincial laboratories for the collection of specimens of suspected influenza cases. A reported outbreak of influenza in Labrador was investigated. Acute shortage of suitable working space has restricted virus work and plans have been made for the construction of a modern virus laboratory.

At the regular annual meeting of the Technical Advisory Committee on Public Health Laboratory Services two resolutions were passed, the first dealing with the importance of laboratory services in the event of biological warfare and the necessity for full consultation with laboratory personnel in defence planning, the second stressing existing laboratory shortages and the importance of detailed study of facilities before any expansion of services is planned. Considerable attention was also devoted to the question of possible integration of public health and hospital laboratory services, to problems connected with the conduct of diabetes surveys, to the possibility of arriving at an accurate breakdown of laboratory costs and to a number of technical questions such as the treponemal immobilization test for syphilis and the importance of pleuro-pneumonia-like organisms in non specific urethritis.

In the first eighteen months of the operation of the Tumour Registry, 562 tumours were received from 40 contributors in ten provinces. Of these, 103 were referred to the panel of consultants, with reports being made to contributors.

During the year, the Department acquired a new mobile laboratory which will be available to provincial departments of health for investigation of public health problems. It consists of two vehicles, the first a standard interurban style bus with the interior fitted as a compact public health laboratory, the second a standard coach for the transportation of research workers.

Several refresher training courses were conducted for provincial public health laboratory workers. About twenty speeches and articles were prepared by members of the laboratory staff during the year, the greater number of which were published in leading Canadian and American scientific journals.

Bacteriology and Immunology

Bacteriology and immunology activities were of three major kinds, assistance to provincial departments of health, control work and special projects.

Assistance to the Provinces. The type of assistance given to the provinces is largely determined by recommendations of the Technical Advisory Committee. The progressively increasing importance of the work carried on by the National Salmonella Reference and Typing Centre, established in the Laboratory of Hygiene three years ago as a result of such recommendation, demonstrates the usefulness of this collaboration in planning. The number of cultures sent to the centre for identification has increased each year; during the past year three types *S. san-diego*, *S. adelaide* and *S. meleagridis* which had not previously been reported in Canada, were found among specimens examined, and a new type, *S. montreal*, isolated by the Quebec provincial laboratories from a patient with gastroenteritis, was identified. The laboratory collaborated in an investigation of *S. enteritidis* food poisoning which occurred in a local hospital. The "typing service" of hemolytic streptococci and diphtheria bacilli was continued for the provinces.

A parasitological diagnostic service was also extended to the provincial laboratories and a number of specimens were received for diagnosis and reported on.

Provision of Standard Diagnostic Reagents. Because of the importance of ensuring that reagents used in laboratory tests are of the highest quality and are standardized to give uniform and interpretable results, the Laboratory of Hygiene prepares and supplies a number of these reagents to the provinces and to D.V.A. hospitals. To meet increased demand for standard agglutinable suspensions of typhoid-paratyphoid bacilli for use in the serodiagnosis of enteric disease, the Laboratory supplied 225 liters of these suspensions, 60 liters more than in 1948-49, and 21 liters more than in 1949-50. Small quantities of *Trichinella* and *Echinococcus* antigens, Blastomycin, Histoplasmin, Toxoplasmin, and Coccidioidin were also distributed on request. Lancefield grouping sera for the diagnosis of hemolytic streptococci, and polyvalent sera for the screening of *Salmonella* organisms were prepared and distributed.

Refresher Training Courses: The Laboratory of Hygiene performs a particularly useful function in the giving of refresher courses to key workers in Canadian public health laboratories. During the year, as a result of requests from laboratory directors for refresher courses in parasitology, medical mycology and enteric bacteriology, a three week course in medical parasitology was given for senior workers from six

provincial laboratories and the Department of National Defence. The course included new techniques and methods of diagnosis together with complete coverage of the three branches of parasitology, protozoology, helminthology and medical entomology, and was presented with a minimum of time spent on lectures. As a continuation of this program, study sets of parasitological material are prepared and sent each month to the provincial laboratories and to the parasitologist of the R.C.A.F. It is hoped that arrangements can be made to give additional training courses in the coming year.

Control Activities. During the year it was possible to increase the routine testing of the potency and safety of such biologic drugs as vaccines, toxoids, antitoxins and sera carried out, under the authority of the Food and Drugs Act, by the Laboratory of Hygiene, which acts in this instance in a technical and advisory capacity to the Chief Dominion Analyst. The number of potency assays for diphtheria and tetanus toxoids are limited now only by the number of experimental animals available. Twelve specimens of tetanus toxoid and one of diphtheria toxoid were rejected because of low potency.

Transfusion sets, intravenous solutions and distilled water were routinely tested for the Canadian Red Cross Blood Donor Service. An increasing number of blood banks have taken advantage of this service during the past year, with a corresponding increase in the volume of work done. Approximately 10 per cent of specimens examined were found to be pyrogenic.

B.C.G. (anti-tuberculosis), pertussis and typhoid-paratyphoid vaccines were routinely tested. Special studies on typhoid vaccines were carried out in close collaboration with the U.S. Army Medical School of Graduate Studies and the Laboratory of Biologics Control of the National Microbiological Institute of the National Institutes of Health. A satisfactory method for the assay of potency was developed and a unification of standards for typhoid vaccine was effected between Canada and the United States. A bacteriological survey, including complete antigenic analysis, was carried out on all cultures used in the manufacture of typhoid-paratyphoid (T.A.B.) vaccine for sale in Canada. A number of cultures were found to be unsatisfactory and licenses of two manufacturers were cancelled. It is intended to maintain this type of routine control.

Regular inspections of Canadian and United States manufacturers' establishments were carried out as usual during the year. British manufacturers holding Canadian licenses were inspected for the first time; licences of two manufacturers were cancelled and that of a third suspended pending correction of faulty conditions.

The Laboratory co-operates with the Division of Public Health Engineering and the Department of Fisheries in control of the shellfish producing areas of the maritime provinces. The acquisition of the mobile laboratory will make it possible to increase the scope and volume of this work. The bacteriological survey of shucked market oysters imported from the United States was continued. New bacteriological standards for grading and acceptance, proposed at the end of last year, were tentatively adopted and appear most satisfactory. Close liaison with United States authorities has been maintained, and a most heartening co-operation continues between the Department and the United States Public Health Service.

An improved scheme introduced by the Department and the Department of Fisheries, for the sampling and routine control of toxicity in clams and mussels on the east coast proved to work effectively. As in past

years, packs of canned clams were routinely examined. The toxicity of shellfish on the east coast was, in general, lower this year than usual. A number of shellfish extracts from the west coast were also received for testing.

The bacteriological examinations of certain types of food, e.g., pharmaceutical gelatin and agar-agar, was continued and an improved method for the examination of gelatin was developed. The discovery of the widespread sale of horsemeat in Ottawa led to a large number of specimens of meat being submitted for identification so that existing small stocks of specific sera were exhausted, and new anti-sera had to be prepared. As a result of these tests and the evidence of the Department's technical staff, a number of vendors were successfully prosecuted for selling horsemeat illegally. Prominence given to these trials by the press has led to an increased demand from municipalities for this type of test.

During the year the Laboratory undertook to carry out routine tests of water samples submitted on a weekly basis by inspectors of the Public Health Engineering Division.

Special Projects. Surveys to determine the incidence of trichinosis and amoebic dysentery, initiated a year ago with the co-operation of the Ottawa Civic and General Hospitals, were continued. The incidence of *E. histolytica* continues to be about 4 per cent, and that of trichinosis about 5 per cent. It is hoped to extend these studies, through a more extensive system of sampling, in an attempt to obtain an accurate picture for Canada of the incidence and distribution of these parasites.

Investigation was continued of methods and materials for the immunization of children. The program, started in 1946 in collaboration with McGill University, has yielded much interesting information and has now been extended to include work with a group of pediatricians in Ottawa.

Studies on oral immunization were commenced last year in collaboration with McGill University and the Connaught Medical Research Laboratories of the University of Toronto. Results of the oral immunization of 40 adults and 15 children with diphtheria and tetanus toxoids were sufficiently valuable to indicate need for further study. While there was little indication that primary immunization can be established in man via the oral route, it appears that this method of administration has possibilities in stimulating a secondary response. There were no reports of constitutional or intestinal disturbance in either adults or children following the ingestion of these toxoids. Lederle Laboratories, Pearl River, New York, are now collaborating in this study.

A rapid method developed for the quantitative estimation of *H. pertussis* agglutinins, by the use of concavity slides, proved to be accurate and to possess several advantages over the techniques ordinarily in use. It was demonstrated at the Laboratory Section meeting of the Canadian Public Health Association in Ottawa in December, 1950.

In order to facilitate the testing of virulence of diphtheria bacilli in laboratories where guinea pigs are difficult to obtain, the plate (in vitro) virulence tests were checked against animal tests on several hundred cultures of different types of *C. diphtheriae*, were found to be highly satisfactory.

To fill the need for a centralized service capable of identifying all types of Enterobacteriaceae—dysentery, paracolon and coliform bacilli,

as well as typhoid-paratyphoid (*Salmonella*) organisms — a *Shigella* (dysentery) typing service, similar to the *Salmonella* service, is being developed, which it is hoped to make available to the provinces in the near future.

During the year the Laboratory assisted in carrying out a bacteriological survey of Ottawa restaurants. With improved facilities made available by the new mobile laboratory, bacteriological services such as this will be readily available to provincial health departments.

At the request of the New York State Laboratories a very helpful and informative study was carried out by the two laboratories of Lancefield grouping sera prepared by them and by the Laboratory of Hygiene.

Clinical Laboratory Services

The Laboratory of Hygiene continued to co-operate with provincial public health laboratories to ensure uniformity in blood tests for syphilis and to distribute standard reagents (antigens and complement) free of charge. A survey to evaluate accuracy of tests performed in provincial laboratories has been completed. This laboratory has been designated by unanimous vote of provincial public departments as the national reference body for syphilis serology.

During the year standard reagents prepared at the Laboratory were distributed to provincial public health and DVA hospital laboratories in the following amounts: Kahn Standard Antigen, 19,210 cc., Kahn Sensitized Antigen, 16,580 cc., Kolmer Antigen, 620 cc., Mazzini Cholesterolized Antigen, 525 cc., V.D.R.L. Slide Test Antigen, 240 cc., Dehydrated Guinea Pig Serum (complement) equivalent to 34,662 cc. fresh serum, and hemolysin, 390 cc.

In the fifth serological survey, completed on 31 March, specimens from 105 syphilitic and 105 nonsyphilitic donors were sent to each of the provincial laboratories; reports will be compiled and analysed.

The Laboratory is participating in an international exchange of blood specimens designed primarily to determine the relative sensitivity levels of the testing procedures used in different countries. An officer of the Laboratory is a member of the Expert Advisory Panel on Venereal Infections and Treponematoses of the World Health Organization.

The Research laboratory at the Ottawa Civic Hospital has been equipped for clinical chemistry studies, so that it is possible to evaluate clinical procedures on the basis of available pathological specimens and to gain an appreciation of the problems of workers in hospital laboratories. In the initial phase of the program a detailed study has been made of methods for the determination of glucose and nonprotein nitrogen in the blood.

Antibiotics and Disinfectants

During the past year, increasing emphasis has been placed on laboratory research and clinical investigation projects as well as on longer established functions such as the antibiotic and disinfectant laboratory control programs and consultative services to hospitals, universities, federal and provincial departments and other public health authorities, members of the medical and allied professions, manufacturers and technical and research organizations.

Research. Study is being continued of the effect of combinations of antibiotics upon micro-organisms causing human infections and the development of resistance to the drugs; the results will shortly be publish-

ed. Also in progress is a study of organisms in human mouths to attempt to shed some light on the cause of tooth decay. Work of this type has involved thousands of sensitivity and hundreds of therapeutic tests in experimental animals. Biochemical studies of the effect of penicillin on bacteria have been continued and definite advances made in knowledge of this difficult question. Numerous miscellaneous short-term projects have been undertaken, generally in response to specific inquiries on such questions as sterilization of instruments, chemical disinfection of surfaces, identification and potency of antibiotics in mixtures, and properties of disinfectants important for their action.

Based on this laboratory investigation, a clinical trial of favourable combinations of antibiotics against refractory urinary tract infections is in progress. Organisms representing stubborn infections received from provincial sources are subjected to laboratory study with a view to their being amenable to some type of chemotherapy. The stability of sterile antibiotic solutions as diluted for use in hospitals has been estimated, with valuable results which could not be obtained in any other way.

Control. An active laboratory testing program is maintained to keep sub-standard material off the market. During the year a total of 2,166 specimens were received for testing (penicillin 1,390, streptomycin and dihydrostreptomycin 314, other antibiotics 204, disinfectants 258) a total of 2,664 tests were carried out and 30 specimens rejected as sub-standard (penicillin 8, streptomycin and dihydrostreptomycin 1, disinfectants 21).

Because of the number of manufacturers of penicillin and the number of forms in which this drug is sold, it is as difficult to control its quality as that of all other antibiotics combined. Routine laboratory and administrative work is kept to the lowest levels consistent with safety and, to conserve use of personnel, improved methods are constantly sought, with full use being made of chemical methods after their initial appraisal. A comparison of chemical methods for testing penicillin appeared in the journal, "Analytical Chemistry" and a study of ultraviolet absorption of dihydrostreptomycin will appear shortly. Other investigations involve important properties of antibiotics such as stability and moisture. The reasons for some of the discrepancies accompanying use of quaternary ammonium disinfectants are also being investigated.

Technical services and advice regarding these drugs have been rendered to the Division of Food and Drugs of this department, the Departments of Agriculture, National Defence, Veterans Affairs and National Revenue, as well as to provincial, municipal and private agencies.

To fulfill a real need for a national centre of antibacterial chemotherapy, a comprehensive program making full use of available staff and facilities has been worked out, with staff dividing their time between investigation and routine assignments.

Virus Diseases

During the early part of the year, the Department collaborated in laboratory investigation of an epidemic of infantile diarrhea which occurred among the Indian population of Manitoulin Island in the summer of 1949. A number of specimens were examined for the presence of virus and serological tests on virus diseases were carried out; it was established that the disease was not caused by any of the commonly known strains of virus.

An epidemic of an upper respiratory infection near Edmonton in the spring of 1950 was investigated and found to have been caused by an A-prime strain of virus influenza. A similar epidemic at Fort Chimo was also studied and experimental data showed that it was not caused by any of the known strains of virus influenza. An investigation of a respiratory infection among personnel at the R.C.A.F. Station, Rockcliffe, was under investigation at the end of the year.

During the year about 950 serological tests were carried out on clinical sera received from the provincial departments of health and, to a lesser extent, from institutions such as the Neurological Institute, Montreal, local hospitals and hospital units of nearby R.C.A.F. stations. As a part of these investigations, all samples were examined to ascertain the presence of antibodies to Q fever. The presence of antibodies in sera from two patients in the west indicates that Q fever may be prevalent in endemic form in the western provinces.

Preparations were completed for the production of stable viral diagnostic antigens and sera for the laboratory diagnosis of a number of pneumotropic virus diseases to be distributed to provincial laboratories, as soon as a training scheme has been completed to familiarize technical staff with the virus diagnostic procedures in which these reagents are being employed.

Virus research also included investigation into diagnostic methods of pox viruses, influenza viruses and into methods of preparation of stable diagnostic antigens and sera.

Western Branch Laboratories

As in previous years, the major portion of the work of the Western Branch of the Laboratory of Hygiene, at Kamloops, has been concerned with location of foci of rodent-, tick- and insect-borne infections, particularly plague, Rocky Mountain spotted fever and tularemia, which in their primary hosts are detected only by means of laboratory tests.¹

No evidence of plague was encountered this year in either Saskatchewan or Alberta, but, for the first time since surveys were initiated thirteen years ago, plague infection was discovered in British Columbia. Infected fleas were found on a marmot taken near Princeton in the southern part of the province; no infection was encountered in other rodents or ectoparasites examined. Highly virulent strains of *Pasteurella tularensis* were recovered from ticks submitted from several different areas of both Saskatchewan and Alberta. No signs of Rocky Mountain spotted fever were encountered.

Advantage has been taken of the opportunity afforded by rodent surveys in the coastal region of British Columbia to gain further information regarding the infections, other than plague, that are harbored by domestic rats. Attempts were especially directed toward determining the incidence of leptospira infection (infectious jaundice).

In addition to studies on rats, attempts have been made to obtain some indication of the incidence of leptospirosis in dogs in the Vancouver area, with fifteen specimens of blood from suspected cases being examined. Three of seventeen live rats from the Fraser Valley harbored virulent leptospira and seven of the fifteen dog sera examined have

(1) Specimens collected by field crews include 904 wild rodents, 19 domestic rats, 1795 ectoparasites and 7737 ticks in Saskatchewan; 559 wild rodents, 1175 ectoparasites and 4094 ticks in Alberta; and 987 wild rodents, 185 domestic rats, 11,045 ectoparasites and 173 ticks in British Columbia.

proved positive to *Leptospira canicola*. One specimen of serum submitted from a suspected human case in Montreal proved positive to *Licteroheorrhagiae*.

A record is maintained of the incidental infections encountered in rodents that may be transmitted to man, including cysticercosis, capillaria infestation pasteurellosis, tuberculosis, pseudotuberculosis, tularemia and rat bite fever.

During the year, some eighty-six special diagnostic tests for tuberculosis, tularemia, Rocky Mountain spotted fever, brucellosis, leptospirosis and lymphocytic choriomeningitis were carried out for Indian Health Service and other laboratories.

Approximately 494 ccs. of concentrated diagnostic Brucella antigen and 130 ccs. of *Pasteurella tularensis* antigen were supplied free of charge, to provincial and D.V.A. laboratories. Research studies were carried out, as time permitted, with a view to improving the antigens and diagnostic tests now in use.

HEALTH PLANNING AND DEVELOPMENT

The National Health Survey

One of the basic purposes of the National Health Grant Program has been to assist the provinces in surveying their health facilities and services. The Health Survey grant has enabled each province to carry out comprehensive studies of all its health services in relation to present and future requirements and an over-all appraisal of needs to serve as a guide in future development of its health program. Within this framework specific attention has been concentrated on planning for the utilization of the health grants and on a thorough survey of hospital facilities. Although the grant, which was made available in 1948, is not paid annually, unexpended portions have been carried over from year to year so that each province has been enabled to carry out an orderly and planned survey. It is expected that all provincial surveys will be completed during the coming year.

Fields of study covered by the provincial surveys include methods of provincial and local health administration, health services provided by provincial and local governments and voluntary agencies, hospital facilities, medical and hospital care plans, and expenditures on health care. Because of the survey it is now possible for the provinces to chart health and hospital needs so that all grants may be used with the most effective results.

The conditions governing the distribution of the grant do not rigidly limit the use to which it may be put. Subject only to over-all federal co-ordination, each province has been left to organize its survey activities according to its own needs. However, a pattern has developed in the provinces which, it is expected, will make possible the compilation, by the Research Division, of a comprehensive nation-wide report on personnel, health services and hospital facilities in Canada.

The Canadian Sickness Survey

Closely associated with the provincial health surveys is the nation-wide sickness survey being carried out with the assistance of the National Health Program to make a general assessment of the amount and prevalence of illness in Canada and to attempt to determine Canada's health needs more accurately than has ever been possible heretofore.

The survey, the largest undertaking of its kind ever attempted, covers a group of 40,000 Canadians representing 10,000 household groups, selected on a scientific sampling basis to represent an accurate cross section of Canada's people. It is being carried on by all ten provinces with the active assistance of the Department and the Dominion Bureau of Statistics. Within the Department the Directorate of Health Insurance Studies and the Research and Epidemiology Divisions have played a major role in the survey's development.

Through the survey, detailed information is being collected by each province on both chronic and acute illness and on injuries and disabling conditions generally, including long term as well as minor ailments. As with the National Health Survey of 1935 in the United States, it may be years before all the data obtained are completely analysed. However, from the time the first survey findings become available health workers will be provided with hitherto unobtainable information that will be invaluable for future planning.

Some of the more important of this information will include good working estimates of the actual amount and distribution of illness in the population, and how much time is lost from regular occupations through illness. In addition some data should become available on the relationship between environment and health, and on consumer expenditure on medical and hospital care. Through a supplementary study of permanent physical disability being carried on in connection with the Survey some idea should also be gained of the numbers of permanently disabled persons in Canada, of the length of time disability has existed, and of the extent to which disability has interfered with capacity to carry on regular occupation. Some information will also be obtained as to the number of disabled persons who are self supporting and of those who require assistance.

The enumeration, which commenced in the autumn of 1950, is planned to continue throughout one full year. Information is collected monthly from selected households by lay enumerators under the direction of trained supervisors employed by the provincial departments of health. Findings will be tabulated by the Dominion Bureau of Statistics and, in co-operation with the Department, the results will be examined, analysed and interpreted. Full co-operation by survey families, family physicians and others connected with the survey has been extended since its commencement.

Rehabilitation of Disabled Persons

During the course of the year, activities in the field of rehabilitation were directed primarily towards preparation for the National Conference on the Rehabilitation of Disabled Persons which took place in Toronto the first three days of February, 1951. The Conference was originally scheduled to take place in May 1950, but was postponed because the Red River Valley flood precluded the attendance of a number of provincial representatives at that time.

The National Conference was the first of its kind to be held in this country. Designed to explore the possibility of the establishment of a national rehabilitation program, to review existing rehabilitation facilities in Canada and to assess the possibility of co-ordinating existing facilities more fully, the Conference was sponsored by the federal Departments of Veterans Affairs, Labour and National Health and Welfare. It brought together representative from the federal and provincial governments, voluntary agencies engaged in work directly or indirectly con-

nected with the various aspects of rehabilitation, as well as professional organizations. Over 200 persons from all parts of Canada were present.

On behalf of the Interdepartmental Committee in charge of arrangements, on which the Department was represented by the Chief of the Industrial Health Division and the Director of the Research Division, the Research Division was responsible for the compilation of a comprehensive volume of background material on rehabilitation, which was supplied to the Conference delegates. This data included studies of existing rehabilitation programs both in Canada and other countries, outlines of the underlying principles of rehabilitation programs and community planning, and studies of the extent of disability, and of income maintenance programs for disabled persons, in Canada.

The Conference, which carried on its deliberations through two working committees, one dealing with vocational guidance, training and placement of handicapped persons, the other with the medical aspects of rehabilitation, approved a number of important resolutions. It recommended that the federal government appoint a full-time co-ordinator for rehabilitation activities in Canada and that a National Advisory Committee be established to co-ordinate and provide central guidance for rehabilitation planning. It was recommended that the Committee consist of 35 members representing government and non-government agencies, associations and professional organizations connected with rehabilitation, the universities, employers and organized workers. Other recommendations dealt with different questions connected with the development of an over-all network of services that would be available to all disabled persons in Canada, to include persons with all types of disability and in all age groups.

HEALTH CARE STUDIES

Departmental activities in health insurance work are the responsibility of the Directorate of Health Insurance Studies, with research studies being conducted by the Research Division.

During the year a complete re-evaluation of the 1945 Proposals for Health Insurance has been undertaken, with close attention being paid to analysis of systems in operation in all countries, including detailed study of program, administrative methods employed, the success with which objectives are being met, the principal difficulties that have been encountered and costs and methods of financing. Considerable study has also been devoted to analysis of the supply of medical, nursing, dental and other health personnel in Canada, their distribution throughout the country and the extent and distribution of shortages, and methods by which they can be overcome.

The operation of the British National Health Service and New Zealand program has received particularly close attention. Certain features of the programs in Sweden and Denmark which appear to possess considerable relevance to Canadian planning continued to receive detailed study and health insurance planning in other countries such as Australia and the United States has been kept under constant review.

Officers of the Department have kept in close touch with health care developments in the United States through membership on the Subcommittee on Medical Care of the American Public Health Association. In addition, close attention has been paid to the work of the Health Insurance Plan of Greater New York.

The experience of the provincial hospital programs operated in Newfoundland, Saskatchewan and British Columbia has received special

attention, and study of the various Canadian voluntary prepaid hospital and medical care plans has assumed an increasingly important role, because of the number of plans which have now been long enough in operation to provide important data on utilization and costs.

Exceedingly valuable material will be made available through the health and sickness surveys now being carried on by the provinces, which will give very much more complete data than any hitherto available on existing health services, and the prevalence of illness and disability.

V

MEDICAL AND HOSPITAL SERVICES

Indian Health Services

During the year some 1,200 full time and many other part time health workers were employed in caring for the health of Canada's Indian and Eskimo population, from Old Crow in the Yukon to Sydney on Cape Breton Island. While the provision of health services to Indians and Eskimos is not a statutory obligation, a well-developed program, under which medical, hospital and dental care and general health services are provided, is administered by the Directorate of Indian Health Service, in an effort to improve the health of the native peoples.

In recent years the expansion of Indian and Eskimo health facilities and services provided by the Department has been greatly accelerated; expenditures rose from \$2,299,763 in 1945-46 to \$9,900,955 in 1949-50 and to \$10,285,668 in 1950-51. Services are provided directly through the operation of a network of hospitals, nursing stations and other health centres, through the employment of full time medical officers, dental surgeons, and graduate nurses, and by special arrangement with private practitioners, private and community hospitals, provincial health services and lay persons who serve as dispensers of drugs and other medical supplies.

There is hardly any considerable area in Canada where Indians or Eskimos are not located; isolation and dispersal dominate the problem of providing health care, especially in the far north. More than half of all Indians are located beyond areas served by roads and railways, and all Eskimos live in the extreme northern areas. The northern Indians and Eskimos are nomadic or semi-nomadic people engaged in trapping, hunting and fishing.

Hospital and Health Facilities and Services. During 1950-51 Indian Health Services operated 18 hospitals with a patient capacity of 2,128 beds, 29 nursing stations with a total bed capacity of 159 beds and 49 other health centres. Size of hospital varied from the 456 bed Charles Camsell Indian Hospital at Edmonton to small units such as the 16 bed Fort Alexander Hospital at Pine Falls, Manitoba; many were formerly operated by the Department of National Defence, others were constructed in recent years by Indian Health Services. A notable event of the year was the opening of the new 200 bed Moose Factory Indian Hospital at the southern tip of James Bay, where the first patient was received on September 9, 1950. New construction under way during the year included the 18 bed Hobbema Indian Hospital in Alberta and an addition of 50 patient beds to the Fort Qu'Appelle Hospital in Saskatchewan. New Health centres were opened at Cape Dorset on Baffin Island and at Pointe

Bleue and Restigouche in Quebec and construction was commenced on seven others.

The services of 362 community and private hospitals were utilized for the treatment of Indians and Eskimos. Hospitals were paid per diem rates, except in British Columbia where Indian Health Services paid for the coverage of Indians under the provincial Hospital Insurance Service. In Manitoba, the Sanatorium Board operated three sanatoria on behalf of Indian Health Services.

Hospital Utilization. Departmental hospitals admitted 7,037 patients, an increase of about 1,000 over the previous year, and patient days totalled 629,026, an increase of about 100,000. Discharges totalled 6,916, of which 5,627 were general and 1,289 were tuberculosis cases. The average length of stay for general cases was 14.8 days. Tuberculosis cases accounted for 22.2 per cent of admissions, 18.8 per cent of discharges, and 86.8 per cent of patient days in departmental hospitals. At the end of 1950, 75 per cent of all Indian Health Service Hospital beds were occupied by tuberculous patients. About 60 per cent of all hospitalized tuberculous cases were hospitalized in departmental institutions and another 10 per cent in mission hospitals in the Northwest Territories, where they were attended by Indian Health Service medical officers.

Admissions to non-departmental hospitals totalled 16,038 during 1950, and patient days numbered 688,173. About six per cent of the new admissions reported were for tuberculosis. Nearly 43 per cent of the total patient days in non-departmental hospitals were for tuberculosis. Thirteen per cent of total days were accounted for by patients in mental hospitals.

Admissions to departmental and non-departmental institutions totalled 23,075 not including new admissions covered by the British Columbia Hospital Insurance Service; 2,539 or 11 per cent were tuberculosis. The admission rate was 159 per 1,000 population or 142 admissions per 1,000 not including admissions to mental hospitals and tuberculosis sanatoria; there was nearly one admission to hospital for every six Indians and Eskimos living in the country.

The overall total volume of hospitalization was 1,317,374 patient days. Close to two-thirds of this total or 842,125 days was for hospitalization of tuberculosis patients. Nearly 90,000 days were for mental illness, and more than one-quarter was for other general conditions. The volume of hospitalization for tuberculosis represented 5.8 days per capita in the native population and for general conditions excluding tuberculosis and mental illness 2.64 days per capita.

Medical Care. In addition to physicians' services in departmental hospitals provided by 35 full-time doctors, treatment services were made available by 28 full-time departmental field medical officers as well as by senior medical students who were employed during the summer months to work under the supervision of departmental officers. The great proportion of medical care was supplied, however, by private practitioners, in areas where there was not a sufficient concentration of population to justify the employment of a full-time medical officer. Private practitioners were either appointed to a part-time position or remunerated on a fee-for-service basis. Professional services were supplied by 58 part-time physicians and 1,224 doctors on a fee-for-service basis.

Supplies of medicine are furnished as required to Indian Bands and Eskimo centres for the use of part-time field matrons and lay persons such as missionaries, traders, police and other officials who serve as

dispensers, many of whom provide care for the ill and do welfare work without payment.

Field Nursing Service. Field nursing, the front line in the struggle to protect the Indian and Eskimo against disease, was carried on by some 90 graduate nurses stationed at the smaller departmental hospitals, nursing stations and health centres, as well as by 40 part-time graduate nurses and practical nurses serving as field matrons. Arrangements were also made with provincial Public Health Nursing Services, the Red Cross, and the Victorian Order to extend their services to Indian Reserves.

Primarily, Indian Health Services nurses participate in case finding and public health work, visit schools and conduct clinics in pre-natal, infant and maternal care, first aid, and home nursing. At times, however, they must provide treatment when physician's services are not immediately available in isolated areas; usually this is done under the direction, by radio, of a medical officer. The dog-drawn sleigh and komatik, freight canoe and freight caboose, saddle and carry-all are frequently the only means of transportation available to the Department's nurses in northern districts.

Dental Services. Dental care was provided by 8 full-time dental surgeons, an increase of 3 from the previous year and, in addition, by about 124 dentists in private practice, on a fee-for-service basis. Reserves and schools were visited to provide dental attention and in some areas, particularly in Manitoba preventive fluorine treatment was applied to the teeth of younger children.

Tuberculosis Services. Indian Health Services have pioneered in the development of immunization techniques. In 1950, 5,605 native children were inoculated with Bacillus-Calmette-Guerin vaccine; a number of community hospitals in Quebec, Ontario, and New Brunswick vaccinated Indian babies regularly.

The tuberculosis case finding program of Indian Health Services has been progressively intensified during recent years. While the scattered population presents peculiar problems, advantage has been taken of special assemblies when the nomadic people come together at Christmas and Easter, the termination of the hunting season, and treaty payment time. During the year almost all Indian Residential Schools, most Indian reservations, and a number of Eskimo centres were covered by x-ray surveys. About 60,000 Indians and Eskimos were examined, and thousands of chest plates of metis and whites were taken. In addition to these surveys, a proportion of community hospitals where Indians are treated filmed all new admissions and information collected by provincial health organizations contributed to case-finding programs. In Manitoba an Indian Tuberculosis Registry was set up at the Central Tuberculosis Registry operated by the Sanatorium Board.

Departmental facilities for treatment continued to be expanded; at the end of 1950 out of 2,584 cases under treatment, 1,512 or 60 per cent were hospitalized in departmental institutions. Sanatorium treatment in Indian Health Service hospitals regularly includes pneumothorax and pneumoperitoneum procedures and the use of streptomycin and streptomycin with para-amino salicylic acid. Some 22,000 grams of streptomycin were used during the year along with 150,000 grams of PAS. Where useful results could be achieved, major chest surgery was undertaken. At Charles Camsell Hospital alone major chest operations totalled 266 as compared to 175 in 1949-50. Occupational therapy was provided and handicraft departments were operated in several hospitals.

Increasing attention is being directed to pre-admission supervision and post-sanatorium follow-up and rehabilitation. Special assistance was given in the form of supplementary diets for Indians convalescing from tuberculosis and to their families, through funds administered by the Indian Affairs Branch of the Department of Citizenship and Immigration; supplementary diets are provided to reduce incidence of relapse, to speed recovery of the breadwinner, and to educate Indians in the benefits to be derived from proper diet. Follow-up and rehabilitation work are difficult problems because of the scattered population and because the Indians are almost all engaged in manual occupations, whereas tuberculosis patients must generally be rehabilitated to non-manual work. Follow-up work was supervised by the nursing service, and use was made of local rehabilitation facilities.

Other Communicable Disease. In addition to the extension of BCG vaccination, established inoculations against diphtheria and whooping cough, typhoid-like diseases, and smallpox were given to every child who could be reached by the Service. Protection against the less common communicable diseases was not given routinely, but where there was obvious threat of spread.

Epidemics during the year were few and well controlled. Influenza was epidemic during the winter as in the general population, a few deaths being reported. There were measles epidemics at various places in Manitoba and five deaths occurred out of 505 cases. In August, 1950, an outbreak of severe common cold followed the visit of the supply ship to Fort Chimo, Quebec, three deaths occurring out of some 300 cases. Less venereal disease was reported. The Manitoba Regional Superintendency collected data on the exposure of Indians in Northern Manitoba to tularemia, a disease transmitted from wild animals.

Health Education. Health education work was undertaken by all members of the field staff of Indian Health Services. Aids frequently used were films, film strips, picture displays, posters, and reading material. Every effort was made to improve health standards by demonstration, example and gentle pressure, with special opportunities being taken through pre-natal and well-baby clinics, during tuberculosis surveys and follow-up visits. Material prepared by the Information Services Division was used extensively.

Professional Education. Several conventions and meetings were attended by departmental medical officers — especially the annual meeting of the Canadian Tuberculosis Association — and papers were read by departmental officers. A number of nurses were enabled to take special courses in public health and tuberculosis nursing, and staff officers at Indian hospitals gave courses of instruction to nurses, nurses aides, and orderlies.

Co-ordination of Facilities. Close co-operation existed between the officers of Indian Health Services, the Indian Affairs Branch of the Department of Citizenship and Immigration which is responsible for the welfare of Indians and of the Northern Administration and Lands Branch of the Department of Resources and Development which administers Eskimo affairs. Departmental administrative officers regularly function as local public health officials and Indian Health Services provided a family physician service.

As in the past, Indian Health Services acted as advisor on health matters to the Northern Administration and Lands Branch of the Department of Resources and Development with respect to the Northwest

Territories. Each year Indian Health Services provides medical care to remote northern areas through a medical officer on board the C.G.S. C. D. Howe, during its Eastern Arctic Patrol. On the 1950 patrol, the medical officer was accompanied by a dentist, an x-ray technician and a medical attendant. More than 1,000 Eskimos were x-rayed, and hundreds received medical attention and dental treatment.

Treatment services were exchanged with the Department of Veterans Affairs and the Department of National Defence whenever such arrangements were advantageous. The transport facilities and signal services of the Department of Transport and the Department of National Defence were used extensively—particularly for purposes of emergency medical care in the north. The services of private air operators and commercial licensees were also extended generously when required for medical missions. Provincial health departments assisted in case finding and preventive public health work. As ever the main burden of active treatment was carried by local practitioners and community hospitals whose untiring efforts contributed greatly to the success of the common endeavour on behalf of the Indian and Eskimo.

Sick Mariners Service

Through the Sick Mariners Service the Department provides medical care and hospitalization for crew members of all foreign-going ships arriving in Canada, for crews of coastal vessels in the interprovincial trade and, on an elective basis, for crew members of fishing and government vessels. Treatment authorized under authority of Part V of The Shipping Act has been provided in various forms since 1867 and is available, for all conditions except prolonged mental illness, up to a maximum period of one year.

Sick Mariners' Dues are levied by the Collector of Customs on every ship arriving in any port in the provinces of Nova Scotia, Prince Edward Island, New Brunswick, Newfoundland, Quebec, British Columbia, and in ports bordering on Hudson Bay and James Bay in Manitoba and Ontario. During the year under review, the amount of Sick Mariners' dues collected was \$236,056, with the cost of treatment extended being \$442,810.

Conditions under which treatment is obtained are kept as simple as possible. The sick seaman applies to the captain of his vessel, who sends him to the collector of customs with a written statement, on concise forms provided for this purpose, setting forth length of employment on the vessel and details regarding Sick Mariners' dues paid. The patient is then referred to the port physician or hospital designated for the treatment of sick mariners. Emergency cases are taken directly by ambulance from the ship to the hospital.

Of a total crew membership of 93,188 on vessels arriving at Canadian ports during the year, the Sick Mariners Service provided treatment for 22,874; 24,823 were treated the previous year.

At Vancouver, Quebec, Saint John and Halifax sick mariners clinics were operated at locations convenient to waterfront facilities. Patient visits during the year numbered 10,863, a decrease of 801 as compared to 11,664 in the previous year. In the smaller ports and hamlets, sick mariners, the bulk of whom are fishermen from very small vessels, were treated by port physicians working on a fee for service basis. The number of treatments given was 20,123, a decrease of six per cent from the 21,464 treated the previous year. At ports intermediate in size, such as

Port Alberni, Victoria, Port Alfred, Lunenburg and Yarmouth, sick mariners were treated by port physicians working on a part time salary, based on work performed. Treatments numbered 19,083, a decrease of 10 per cent compared to the 21,529 treatments given the previous year. In the 150 hospitals treating sick mariners the total cost of hospitalization amounted to \$331,507, with the average per diem cost per hospital day being \$7.57 as compared to \$7.10 the previous year.

Considerable success was noted during the year in the treatment of acute forms of tuberculosis with paraminosalicylic acid, combined with streptomycin or dihydrostreptomycin. Patients requiring specialized treatment or facilities which were not available in the smaller ports, were transferred to centres where necessary treatment could be obtained.

During the year a new sick mariners clinic was completed in Montreal and commenced operations when navigation opened on the St. Lawrence River in 1951. In December, the sick mariners clinic at Saint John was destroyed by fire. Fortunately the new clinic quarters in the new Immigration Building, at West Saint John, were ready for occupancy, and the activities of the clinic could be transferred immediately. During the year new electro-steam sterilizers were installed in sick mariners clinics at Vancouver and Halifax, and in February the Halifax clinic was renovated and enlarged, provision being made for two much needed private examining rooms and for an enlarged and suitably furnished patient's waiting room. An additional physician was added to the staff of the Vancouver clinic, which continued to be the busiest out-patient unit.

Statistical data on the Sick Mariners Service is contained in Table 21, on page 122.

Leprosy

During the year the Department continued to make full use of the newer drugs available for the treatment of leprosy, and favourable results were obtained in certain early cases.

Nine patients were under treatment during the year, two at the federal hospital at Bentinck Island in British Columbia and seven at the Hotel Dieu de St. Joseph Hospital at Tracadie in New Brunswick. At the latter institution, which is assisted by a federal grant, a modern 12 bed wing is operated as a leprosarium, facilities are available for recreation and occupational therapy, and patients have the freedom of a large property, including a strip of seashore.

There were no admissions and no deaths during the year. One new case of leprosy, a Maltese male, was legally committed and awaiting admission at the end of the year. One patient was discharged from Tracadie as arrested and non-infectious, but is continuing treatment under medical supervision, as a precaution against recurrence.

Of the six patients remaining in hospital at Tracadie four were under active treatment and showed signs of active leprosy in varying degrees. Two were considered as arrested cases but required permanent institutional care. Four of the patients remaining at Tracadie were males and two were females. Three were of French-Canadian origin, two of Russian ancestry (one Canadian-born) and one Chinese. Both patients at Bentinck Island were Chinese males.

VI

EXAMINATION SERVICES

Quarantine

The Quarantine Service, the oldest health activity of the federal government, is operated under authority of the Quarantine Act for the purpose of preventing the entry of infectious disease into Canada. All persons coming from abroad are inspected immediately on arrival, with radio pratique being in effect for vessels other than those arriving from infected areas. No cases of smallpox, typhus, yellow fever, plague or cholera were found on vessels or planes arriving in Canada during the year, though these diseases were present in countries from which many had departed. On August 2nd, 1950, the Quarantine Regulations were amended to require immunization against smallpox of susceptible persons entering the country.

Organized Quarantine stations for the inspection of vessels are located at William Head, B.C., with sub-stations at Vancouver, Victoria and Esquimalt; at Quebec, with sub-stations at Rimouski, Port Alfred, Sorel, Three Rivers and Montreal; and at Saint John and Halifax. A full time service is also operated at Dorval and Gander airports and the services of medical officers for inspection duties are available at Harmon Field, Stephenville, Newfoundland, at Reserve Airport, Sydney, at Dartmouth, Moncton, Malton and Victoria and at Sea Island Airport, Vancouver.

During the year 421 vessels applied for duplicate pratique and 1,708 for radio pratique. Local customs officers, in their capacity as quarantine officers at unorganized ports, reported the entry of 502 vessels. A total of 2,505 vessels, having on board 306,854 persons, 157,468 of whom were crew members, 149,243 passengers, were inspected by medical officers of the service. In addition, 2,039 aircraft carrying 51,514 persons were inspected on arrival from abroad. Of a total of 862 vessels inspected for vermin and rodents 543 had come from plague infected ports. Eighty-eight vessels were fumigated; 361 were granted exemption certificates; 263 had their certificates endorsed and 145 were remanded to other ports. A total of 263 rats and 126 mice were recovered.

In addition to the fumigation of merchant vessels, officers of the Department, on request, fumigated various ships and shore establishments for the Royal Canadian Navy, the Marine Section of the R.C.M.P., the Marine Branch of the Department of Transport, the Pilotage Service, and the Immigration Branch of the Department of Citizenship and Immigration.

Additional duties carried out by Departmental officers included the medical examination of pilots, light-house keepers, radio operators and other civil servants serving in remote areas, immigration medical examinations, the treatment of sick mariners and the pre-employment and periodic examination of marine personnel employed by the Department of Transport.

International Certificates of Inoculation and Vaccination were prepared in booklet form for distribution to persons travelling abroad; the demand for these greatly increased during the year.

The number of centres at which yellow fever inoculations may be obtained was increased during the year to fourteen and a total of 936 inoculations were carried out. Centres are now located in St. John's,

Halifax, Saint John, Quebec, Montreal (2), Ottawa, Toronto (2), Winnipeg, Regina, Calgary, Edmonton and Vancouver.

Statistical data on quarantine activities are contained in Tables 19 and 20 on pages 120 and 121.

Immigration Medical

The Department's responsibility for the medical examination and treatment of immigrants is laid down in the Immigration and National Health and Welfare Acts. Its immigration activities extend to Hong Kong to the west, to Europe and to India and Pakistan in the east; they include the medical screening of prospective immigrants, medical and hospital services to immigrants when required, and the provision of medical advice to the Department of Citizenship and Immigration on immigration questions.

The vast bulk of immigrants were first examined abroad by Canadian medical officers; others by approved local physicians. In addition, as an added protection, all immigrants were again examined on arrival in Canada. At Canadian seaports and airports modern treatment facilities were maintained for persons arriving in Canada who were ill and unfit to travel to their destinations, and for those suffering from obscure or undiagnosed conditions requiring observation for diagnosis. Necessary hospital costs are chargeable to the transportation company which brings the person to Canada.

Full time Canadian medical officers were stationed in the British Isles, at London, Liverpool, Glasgow and Belfast, and on the continent at Paris, Brussels, The Hague, Salzburg, Stockholm and Rome. Six Canadian medical officers worked with immigration teams in Germany, at Bremen, Fallingbommel, Karlsruhe, Hamburg and Ludwigsburg. Canadian medical officers will soon be carrying out examinations in Denmark and, on a more temporary basis, in a number of other places where groups of persons seeking entry to Canada could be gathered for screening. During the year the number of full time medical officers serving abroad was increased from twenty-four to thirty-three and, in addition, local roster doctors were employed throughout the British Isles, in different countries on the continent of Europe, and in Pakistan, India and Hong Kong.

All medical examinations by Canadian medical officers were performed without charge to the immigrant, and commencing on August 15th, 1950, free x-rays were also provided at Paris, London, Liverpool, Glasgow, Belfast and Dublin. Chest x-rays have proved of considerable value in disclosing preliminary tuberculosis in a large number of cases where it could not have been detected by clinical examination.

During the year a total of 136,755 immigrants were medically examined abroad and 77,348 on arrival in Canada. Of the numbers examined 42,445 were from the British Isles, 92,076 from Europe and 2,234 from the Orient.

1,708 persons were refused entry for medical reasons. Statistical data on the Immigration Medical activities of the Department are contained in Tables 17 and 18 on pages 117, 118, and 119.

Civil Service Health

The Department's responsibility for the conservation and promotion of the health of federal government employees is discharged through the Civil Service Health Division, which provides complete diagnostic and

health counselling services and emergency medical care for federal civil servants located in Ottawa, reviews sick leave certificates of all federal civil servants and acts in an advisory capacity to federal departments on health problems relating to government employees. Its services, which are provided as a part of, and in conjunction with, other components of community health and welfare resources, are directed primarily toward improvement of efficiency and productivity of the public servant, and through him to the exercise of the greatest possible influence on positive health education.

Since the establishment of this preventive program its value to federal departments, as well as the economy, efficiency and uniformity of practice resulting from unified control have become increasingly recognized. The seventeen health units now in operation which are staffed by 38 nursing counsellors, provide services to about 17,500 employees in the Ottawa area. During the past year the extension of full health services was completed for employees in the Ottawa area of the Post Office Department and the National Research Council.

Some indication of the extent to which diagnostic and emergency services have been increasingly utilized in the four years since the program commenced is shown by the increase in the average monthly number of health unit visits each year for every 100 persons to whom these services were available; from 33 during the first year of operation to 40 in the second, to 58 in the third and to 65 in the past year. A total of 136,941 visits, an increase of about 20,000 over the previous year, about 7,000 of which were accounted for by the two new units, were paid to the health units; 94,000 or 70 per cent were first visits, or visits resulting from new disabilities. The ratio of males to females visiting the units was 4:5, which is of interest when considered in relation to the fact that 53 per cent of civil servants covered were males, 47 per cent females.

Of the total visits some 20 per cent required special investigation into socio-economic or welfare factors. The number and proportion of cases requiring some form of social service have increased as this work has become known to employees and departments. Activity in this field must necessarily be limited by the amount of nurses' time available. One of the most difficult achievements, and one demanding a high degree of skill and judgment on the part of the Nursing Counsellor, is imparting to the patient, while avoiding paternalism, enough special knowledge and assistance to permit him to deal adequately with his own problem. The services of the psychologist have been increasingly important in assisting the nursing counsellors to improve these skills. He is called upon to investigate and furnish advice and assistance on a wide variety of personnel problems, relating chiefly to job efficiency and adjustment, suitable placement of neurotic or physically handicapped employees, assessment of fitness for continued employment, vocational guidance to youthful or dissatisfied employees and employees not making the most of their capabilities, and to the reorientation of attitudes of maladjusted employees. During the past year he has conducted over two thirds of his interviews in the health units, so as to enter into the working environment of the employee, to bring the nursing counsellor, when necessary, into the picture, and to reduce employee time loss.

Of particular significance is the fact that only 2.7 per cent of persons visiting the units were unable to return directly to their work after receiving assistance. The slight increase in this figure over that of the past year may be attributed to the widespread outbreak of the mild form of influenza which reached its peak during the third week of February.

Respiratory, digestive, menstrual disorders, and diseases of the skin and cellular system, in that order, predominated among reasons for calls at the units. The ratio of respiratory to digestive disorders for the entire fiscal year was just over 2:1, a slightly higher ratio than in the previous three years, due largely to the influenza epidemic. Nutritional problems continue to show a relatively high incidence and the specialized facilities of the Nutrition Division are available for assistance in individual nutrition problems. Diseases of the circulatory system, of the nervous system and of the bones and organs of movement, in that order constituted the chief causes of separation on medical grounds from the public service. Of the total of 210 separations on medical grounds, 165 or about 80 per cent, were in the 50 to 60 year age group.

With the increase in health unit coverage in the Ottawa area it has become more important to maintain a strong clinical and administrative staff at the Division's Health Centre. This staff is small by current industrial medical standards; there is approximately one physician for every 7,000 employees. As a consequence, all examinations and consultations are made by appointment and, except for urgent cases, appointment bookings are filled for weeks in advance. During the year some 6,498 employees were referred to the Health Centre for examination, consultation, or treatment of emergencies by staff physicians and consultants. Both the laboratory and x-ray sections experienced a marked increase in work load. In all, 5,917 laboratory procedures were carried out, and 4,291 x-rays, including 3,300 chest films, were taken.

Statistical information on sickness absenteeism in the civil service is compiled and analyzed by the Public Health Section of the Dominion Bureau of Statistics. The results of this analysis will be the subject of a special report to be prepared by the Bureau in conjunction with the Civil Service Health Division. The program continued to be used as a demonstration unit by several of the universities and assistance was provided by the health service staff to a number of programs and conferences in both the health and welfare fields.

Detailed statistical information concerning the activities of the Division is contained in Tables 5 to 9 on pages 106 to 109.

Civil Aviation Medicine

The civil aviation medicine functions of the Department, which are carried on by the Civil Aviation Medicine Division, fall generally into two major classes; administration duties connected with the setting up and maintenance of physical standards for civilian pilots and aviation personnel, in which the Department acts in an advisory capacity to the Department of Transport; and general advisory duties and developmental work in the field of aviation medicine.

In the first of these two major functions the Civil Aviation Medicine Division reports directly to the Superintendent of Air Regulations of the Air Services Branch of the Department of Transport in passing on the fitness of pilot applicants and licence holders to assume or continue flying duties. The Division administers an aviation medical examining service consisting of 242 medical examiners who work on a fee for service basis; 32 new examiners were appointed during the year in districts where new flying activity had developed or where an appreciable increase in flying operations had occurred. During the year approximately 9,200 medical examination have been screened and 950 electrocardiograms and approximately 550 audiogram reports on professional pilots have been reviewed.

Sixty-five examiners were given a six day refresher course at the Royal Canadian Air Force Institute of Aviation Medicine in Toronto, to bring the total trained in the past two years to 155. The object of this training has been to impart to examiners a broad concept of the scope of aviation medicine, some idea of the part it plays in safe air operations, and more important, to improve assessment of the physical disabilities of pilots in relation to flight duties.

Five of seven authorized Regional Medical Consultant Boards have been set up at the request of the Department to render assistance in special borderline or contentious cases where expert clinical opinion supported by a reasonable knowledge of flight conditions is necessary to determine fitness for flying.

The second of the Division's major functions involved serving in a general advisory capacity on such subjects as flight time limitation for aircrew, emergency means of meeting explosive decompression at high altitudes, high altitude training for civil photographic survey operators, the initiation of psychological studies intended to improve commercial and transport pilot selection, and advice to interested organizations in the field of air ambulance requirements and limitations. Studies are to be continued in the development of satisfactory airport crash emergency arrangements, where the Division acts as a co-ordinating unit between the major operators, Air Services and the Canadian Red Cross.

In the field of physical standards and requirements for aviation personnel generally studies have been made of existing standards for hearing ability of commercial and transport pilots, and of colour perception requirements in effect for private pilots, with a view to the possibility of downward revision in the light of advances and improvements in the technique of flying and in navigational aids. The first of these studies has been approached through a survey of the past flying history of 1,000 commercial and transport pilots, in conjunction with testing by pure tone audiometer, the second by attempting to institute routine colour perception flight tests for applicants for private pilot licences who fail the routine clinical test by only a marginal degree.

Particularly close liaison has been maintained with the R.C.A.F. in using service assistance and facilities to present refresher training in aviation medicine, in assessing medical examinations for the service in the Air Cadet Scholarship Flying Training Programme, in screening the service medical examinations of former R.C.A.F. instructors currently being trained under the terms-of-reference of "Operation Chipmunk", and finally in a free interchange of clinical histories and examination results.

VII

INSPECTION AND ENFORCEMENT SERVICES

Food and Drugs

The Food and Drugs Act and the Proprietary or Patent Medicines Act govern the safety, purity and quality as well as the labelling and advertising of all foods, drug and medicines sold to the public in Canada. Both acts are administered by the Food and Drugs Divisions of the Department, with assistance, in the case of enforcement activity and the drafting of legislation and regulations, from the Department's Legal Adviser.

The year 1950 marked the seventy-fifth anniversary in Canada of the enforcement of legislation to protect the consumer from adulteration of food, drink and drugs. The first Act was passed in 1874 and enforcement began on January 1, 1875. This Act, the first of its kind in the western hemisphere, has had considerable influence on the development of the food and drug industry in Canada as well as on legislation in other countries; it is subject to continuing review and revision in the light of changing conditions. The introduction of new foods, new drugs and new processes, and the development of advertising methods, make necessary the constant revision of control requirements. Constant liaison with other enforcement agencies is necessary if duplications and gaps in enforcement activity are to be prevented; active collaboration must be maintained with other countries if the quality of imports is to be kept at satisfactory levels; effective working relationships must be maintained with industry in the drafting of standards and regulations.

During the year there were a number of new developments in the administration of food and drugs work. Through agreement with the Department of Agriculture the registration of disinfectants under the Pest Control Products Act was discontinued as of December 31, 1950, and marketing of these products is now governed by the Food and Drugs Act. At the request of the Department of Agriculture and in co-operation with their inspectors the Department commenced screening drug products offered for veterinary use.

A Guide for Manufacturers and Advertisers was issued to present, for the information of the trade, the Department's interpretation of the Food and Drugs Act and Regulations in relation to advertising.

As a result of an inspection of English firms licensed under schedule B of the Act for the manufacture of certain drugs, conditions of manufacture were found to range from excellent to very bad and, on the strength of the inspecting officer's report four licences were cancelled.

During the Red River Valley flood the services of the West Central Regional Branch of the Food and Drugs Division were placed at the disposal of provincial and local authorities and the Central and Regional Branches assisted in inspection work following the flood.

The Food and Drugs Act was proclaimed on July 15th, 1950, in Newfoundland, where development of administration procedures will require much time and study because of travel and communications difficulties.

A more flexible scheme for the use of scientifically qualified inspection staff in laboratory work was introduced. The establishment of two laboratories in the inspection offices in Saint John, and St. John's, was planned, to obtain more rapid examination of import shipments and a preliminary study was begun to determine what actual analytical and

examination work can be done in inspection offices, with the two-fold object of reducing the number of samples sent to regional laboratories, thus releasing staff for other duties, and of giving quicker service to the public.

Assistance of a technical or enforcement nature was given to a number of government departments and agencies, including the Department of Agriculture, the Department of Fisheries and the Royal Canadian Mounted Police. Canadian and International Standard preparations, used in the assay of drugs, were distributed to manufacturers and research institutions on request.

Since the Food and Drugs Act is international to the extent that it applies to imports, the Department takes an active interest in legislation and standards and methods of analysis of foods and drugs in foreign countries and by international or foreign authorities, including the World Health Organization, the United Nations Narcotic Commission, the British and United States Pharmacopoeia Commissions, the Association of Official Agriculture Chemists, and the United States Food and Drug Administration. At a joint meeting of the American and Canadian Bar Associations, in September, a proposal was made by the Minister for more uniform food and drugs legislation in the interests of international trade. The Director, Food and Drugs Division, also asked for greater uniformity of food and drug standards, labelling and nomenclature.

Enforcement

Enforcement action may take one or more forms, depending on the circumstances of each case, and may consist of warnings, seizures or prosecutions. During the year 1452 warnings were issued, 84 seizures of stocks of foods or drugs were made, and 188 prosecutions carried out.

Special efforts are being made to enforce the regulations requiring that certain pharmaceuticals such as barbiturates and sulfa drugs, be sold to the public only on prescription or, in the case of veterinary use, under other specified restrictions. Some prosecutions were found to be necessary to emphasize the seriousness of this matter.

The "molasses for health" fad, which grew to fantastic proportions during the year, presented a number of difficult problems, as vendors, without advertising, themselves found a tremendous market had been built up for this product through sweeping claims regarding its virtues as a cure for a surprising number of human illnesses that were made in a popularly priced and widely distributed book. This ready public acceptance of claims made by a writer untrained in health work emphasizes the need for close inspection of all advertising of food and drugs. While vendors generally made no claims themselves, one, who did advertise that "If you suffer from heart troubles, high blood pressure or gall stones, try crude molasses", was prosecuted under Section 6A of the Food and Drugs Act. Conviction was refused on the grounds that a recommendation to "try" a product was not a recommendation for treatment. The case was appealed and a conviction obtained.

Court action was taken in a number of other cases where fraudulent claims were made. Convictions obtained against a Montreal firm are of general interest because they involved the advertising of an appliance, rather than a drug. Prior to the 1939 amendment to the Act which made it possible to take action in such a case, it would not have been possible to have laid a charge in this instance, the first of its type which has arisen since the amendment came into force. Convictions were obtained under Section 6A of the Food and Drugs Act for representing an appliance by

label and advertisement as treatment for a wide number of diseases, under Sections 32 and 32A for improper labelling and misleading advertising and under Section 406 of the Criminal Code, for having advertised it without having conducted adequate tests of its efficiency.

A number of butchers and vendors in the Ottawa district were prosecuted for selling horsemeat; it is an offence to sell horsemeat without clearly labelling it as such, or to use it in the manufacture of sausages or to use it or any other meat, except beef, in hamburger steak. As it was apparent that the vendor had often acted in good faith, believing his product to be beef, Section 24 of the Act was invoked to bring charges against the wholesaler or supplier as third party.

Failure to obtain conviction against a Cornwall cheese factory for violation of cheese-holding regulations revealed weakness in regulations, which are now under study. As a result of a case where 2,800 gallons of maple syrup seized in Quebec were found to be adulterated with cane sugar, conferences were held with the federal and provincial departments of agriculture, and methods of close co-operation developed.

Other enforcement activities which have some general interest include efforts undertaken to improve cleanliness in small canneries doing a local business and flour mills which have been inspected for cleanliness and where samples have been examined—as a result of preliminary work it is evident that much remains to be done in this large field. Several large import shipments of dried fruits and nuts were refused entry because of insect infestation and other filth. It is apparent, however, that examinations and past refusals are leading to a better quality of this kind of food being offered for import into Canada. Special attention is being given to food colours, some of which in the past have represented a definite health hazard. This year, a shipment of 150 pounds of food colour imported from England was found to be of a kind not permitted in foods and was returned to the exporter.

Scientific and Technical Studies

Scientific and technical studies related to food and drug legislation may be divided into five classes: development of analytical methods and standards; surveys of the labelling and advertising of nationally or locally advertised products; fundamental research, including studies of the action of new drugs or chemicals used, or intended for use, in food; and routine analyses of samples where adulteration or misbranding is suspected and surveys of various products collected from all parts of Canada, both of which functions are chiefly carried on by the regional laboratories and are summarized in Tables 10, 11, 12 and 13, pages 110 to 113.

Development of Analytical Methods and Standards. Work to develop new methods of assay and new standards for foods or drugs occupied a large proportion of the time of the central laboratory in Ottawa, with some assistance from the regional laboratories.

Surveys of Labelling and Advertising. A survey of labelling of analgesic products was concluded in 1950, with a total number of 355 labels being examined. Appropriate action to have the labelling corrected was taken where necessary and some statistical data regarding the composition of these products was obtained. Other surveys were carried on of the labelling of antihistamines, vitamin specialties, cod liver oil and emulsions and cocoa and chocolate products. A survey of labels by companies was commenced and work on the pharmaceutical products of eight companies has been completed.

Information and Reports. The Information Centre, in its third year of operation, has prepared and issued 19 Trade Information and 36 Staff Information Letters and issues weekly reports on detained imports of foods and drugs. The cataloguing of all drugs manufactured in Canada, including the collection of specimen labels, was undertaken during the year.

Fundamental Research

Food Chemistry. A method was developed for determining antioxidants in lard and shortening, the manner in which antioxidants react during storage was studied and a chromatographic method for determining monosodium glutamate (a substance used to enhance flavour) in foods was developed.

A collaborative study was commenced with the Association of Official Agricultural Chemists to determine starch in meat products and a determination of metallic contaminants in gelling agents was continued.

Analyses of service rations including determination of their keeping qualities were carried out for the Department of National Defence. Work on methods for determining fill of containers for dry products (tapioca, rice, etc.) and canned fruits and vegetables was carried out. A method for the first group of foods has been developed and a study of the filth and bacterial content of flour and canned chicken (including field surveys as well as laboratory work) was begun.

Work to establish a standard for bone flour was begun.

Vitamin and Nutrition. Surveys on the vitamin content of margarine and liver extracts have been completed.

Collaborative studies were conducted with the United States Pharmacopoeia Revision Committee on vitamin B₁₂ methods as well as with the federal Department of Agriculture on stock feeding oils for vitamin A. A survey was carried out of products containing vitamin B₁₂. The material included liver extract, solutions and tablets of vitamin B₁₂ and concentrates obtained in the manufacture of antibiotics. Eight different procedures for the determination of vitamin C were studied and the one most convenient, which at the same time gave the necessary accuracy, was chosen for routine work. The study of the biological method for the assay of vitamin D was continued. It was found that the animal protein factor added to yeast gave four or five times the growth in the test animals as the present basal diet. This is probably due to vitamin B₁₂ in the APF. Biological and chemical methods for determining vitamin E in some materials are under investigation.

Alcoholic Beverages, Cosmetics and Food Colours. Standards of purity were laid down for the seventeen permitted food colours. This involved the complete analysis of many samples and investigation of the best methods of determining arsenic, lead and other metals in the colours. Surveys of the composition of tooth pastes, face powders and deoderants were also undertaken.

A determination of the characteristics of imported West Indian rum was commenced. The absorption in the ultra-violet of distilled beverages has produced interesting results.

Physiology and Hormones. A standard for the adrenocorticotrophic hormone (ACTH) was nearly completed and methods of assay are being studied. Studies of the effect of ACTH have been done on the blood eosinophil cells, adrenal cholesterol and phosphorus and blood phosphorus levels. The biological assay and chemical determination of cortisone are

being examined. A study of the possible correlation between the histamine-histaminase system and adrenal function is under way.

The mouse convulsion test for insulin has been improved. The methods for determination of oestrogenic substances in poultry for enforcement of regulations forbidding its use were investigated and studies on the effects of continuous administration of oestrogens to rats were begun.

Collaborative work was continued with the Association of Official Agricultural Chemists on colorimetric methods for steroid oestrogens and stilboestrol.

Pharmaceutical Chemistry. Because current methods for determining ephedrine have been found unsatisfactory, a new colorimetric method has been devised, which it is intended to announce shortly.

Surveys of Fowler's Solution, iodine preparations sulphathiazole, and antihistamines on the market have been conducted. Assay procedures for Fowler's Solution, iodine, and sulphathiazole have been studied and improvements established in those for iodine and sulphathiazole.

Standards for weight variation in tablets and disintegration times of tablets are being considered in the light of work carried out this year.

Pharmacology and Toxicology. Preliminary work shows that roosters may be a more reliable test animal for veratrum alkaloids than cats or dogs.

Experiments have disclosed quite wide differences in both sedative and local anaesthetic properties of various antihistaminics.

Studies of gitalin, a cardiac drug, have shown significant differences in the potency of experimental lots.

Reported differences in the results of the assay of oxytocin by uterine and chicken blood pressure methods have not been substantiated.

Chemical and bioassay methods for d-Tubocurarine chloride give comparable results.

Toxicity studies of the antioxidants, nordihydroguaiaretic acid and propyl gallate, show that their disintegration products were not more toxic than the original compounds.

It was demonstrated that antabuse *in vitro* is a very powerful inhibitor of liver aldehyde dehydrogenase, functioning in this respect by apparently competing with diphosphopyridine nucleotide for active centres of the enzyme. Ascorbic acid (vitamin C) and reduced glutathione were effective in reversing the inhibition. Antabuse increases the hypnotic effect of barbiturates.

Organic Chemistry. Ion exchange resins have been used with promising results in the quantitative analysis of narcotics.

Porphyroxine-meconidine is being used as an indicator along with other factors to determine the country of origin of opium, a problem undertaken for the Narcotic Commission of the United Nations.

Biometrics. Statistical studies of sampling techniques for dried fruits, canned goods and cereal products were carried out.

Animal Colony. There were 16,369 rats, bred in the laboratory animal colony and used for experimental work as well as 733 animals of other species.

Proprietary or Patent Medicines

The sale in Canada of proprietary medicines is governed by the Proprietary or Patent Medicine Act, administered by the Proprietary or Patent Medicine Division, under which all proprietary medicines offered

to the public must be registered. The sale of all registered preparations is licenced on a year to year basis so that if experience in use or advances in medical knowledge make it apparent that it is not in the public interest to permit further sale, further licencing may be refused. Formula and recommendations for use are passed on by medical officers of the Department in all cases before registration or licence is granted. An Advisory Board of outstanding physicians and pharmacologists, appointed under Section 9 of the Act, passes on what drugs may be used with safety, prescribes limitations when necessary, passes on whether medication of liquid medicines containing alcohol in excess of 2½ per cent is appropriate and sufficient to unfit them for use as alcoholic beverages, advises on and fixes dosages for scheduled drugs, and investigates the suitability of unusual combinations of drugs. At meetings held during the year formulae are reviewed and problems are discussed with manufacturers.

During the year the registration of 3,836 preparations were reviewed. Two hundred and fifty-two new medicines were examined for registration; 157 were approved and 95 rejected. One thousand nine hundred and thirty labels, wrappers and newspaper advertisements were examined. In addition, approximately 10,225 individual radio commercials were reviewed for the Canadian Broadcasting Corporation, which requires that all radio announcements dealing with proprietary medicines be passed on and that any false, misleading or exaggerated statement be corrected or deleted.

Assistance continued to be given to manufacturers in the preparation of labels and advertisements.

Samples were secured on the open market, and examined as to quality and quantity of drugs and labelling, with the Inspection Service throughout Canada of the Food and Drugs Divisions contributing by procuring samples and reporting irregularities in advertising and methods of merchandising.

Narcotic Drug Control

Departmental activity in narcotic drug control work, carried on through the Division of Narcotic Control, includes maintenance of control over narcotic drugs required to meet domestic needs and co-operation with the R.C.M.P. and other enforcement agencies in suppression of illicit traffic.

Addiction is known to have increased during the year, partly due to the availability of substantial quantities of heroin which have been smuggled into the country, and partly to general high levels of prosperity and consequent increased earning power of addicts and potential addicts. It is known that little if any of the heroin imported for medical requirements has been diverted for illicit use, yet enforcement officers are continuing to encounter substantial amounts of this drug. The ease with which it can be obtained illegally, combined with its satisfying addiction properties, has resulted in heroin to a large extent replacing opium and morphine in illicit traffic.

Control over the import, export and distribution of legitimate narcotic supplies continues to be exercised through the licensing system administered by the Department. Licences are granted only to approved wholesalers and provide for restriction of sale to hospitals, physicians, dentists, pharmacists and veterinary surgeons. During the year licences were granted to 152 distributors. Licensed distributors are required, under the terms of the Opium and Narcotic Drug Act, to maintain complete records of all narcotic drug transactions. Regular inspections, in-

cluding audits of stock and records, were conducted by three Departmental narcotic auditors to ensure that all transactions were executed in the proper manner. Detailed monthly reports of transactions in narcotics are made to the Department by licensed wholesalers, and individual records are maintained for each hospital, physician, pharmacist or other person authorized to distribute the drugs, so that it is possible to detect the development of misuse or abuse.

To supplement information received from monthly reports by licensed distributors, the Division also made a careful check of over 5,000 reports from retail drug stores across Canada. All stores were required to forward at least one report covering a three-month period, with retail druggists in larger urban centres such as Montreal, Toronto, Winnipeg, and Vancouver, being requested to supply two reports. In addition, Departmental auditors inspected narcotic security measures in over 1,000 hospitals during the year, and many interviews were held with professional persons and officials of firms interested in narcotic matters.

In May, 1950, a new type of duplicate-page narcotic register for the recording of narcotic transactions by all retail pharmacies was introduced and has proven of considerable assistance to druggists in reporting to the Department, as it is only necessary to tear out and forward the pages covering the period for which a report is required.

As basic narcotics are not manufactured in Canada, considerable responsibility devolves on the Department for ensuring that sufficient supplies are maintained to meet the medical needs of the population. During 1950 a total of 144 import licences were granted, including authority for the import of the following quantities of narcotics, in terms of pure drug: opium, 2,889 ounces; Morphine, 2,337 ounces; heroin, 748 ounces; cocaine, 1,344 ounces; codeine, 93,269 ounces; and demerol, 5,480 ounces. Thirty-nine export licences, largely to the British West Indies, were also issued during the year.

The total number of convictions under the Opium and Narcotic Drug Act during the judicial year ended September 30th, 1950, was 360. Possession of drugs was the most common offence, with 342 convictions being registered. Thirteen convictions were for selling or offering for sale. In addition to convictions under the Opium and Narcotic Drug Act, there were also ten convictions under the Canadian Criminal Code, for conspiring to sell, possess, or distribute a narcotic. Six convictions were obtained under the Habitual Criminal Section of the Criminal Code, under which persons convicted are sentenced to an indeterminate term of imprisonment. Of the 360 convictions under the Opium and Narcotic Drug Act, 173 were in British Columbia. In contrast, there has been very little narcotic addiction uncovered in the maritime provinces. A marked increase in the number of cases in Alberta has occurred: 45 as compared to 23 the previous year.

There was no increase in the number of females associated with illicit transactions, with the ratio of male to female convictions remaining at about five to two. There does, however, appear to be a lowering in the average age of new addicts; a number have come to the attention of enforcement officers who were in their early twenties, and some in their teens.

A decrease in the number of thefts of legitimate domestic narcotic supplies was noted, though this may be attributed, in part at least, to substantial quantities of narcotics, particularly heroin, being smuggled into the country.

In addition to control of narcotics within Canada all required information in respect to narcotics was furnished to the United Nations Narcotic Commission. Quarterly reports of imports and exports were supplied as well as complete statistics covering consumption figures and estimates of narcotic requirements for the coming year. Arrangements were made for an annual summary to be forwarded to the Commission, showing quantities of drugs imported into and exported from the country, amounts of narcotics seized from illicit channels and other items of interest which might assist in international control. Reports covering seizures of narcotics and sentences imposed on convicted persons were also submitted to the Secretariat of the United Nations together with a brief history of the circumstances surrounding each case, so that narcotic authorities in other countries could be made aware of the procedures followed by traffickers in Canada.

Statistical information on narcotic drug control work is contained in Tables 14, 15 and 16 on pages 114, 115, and 116.

Public Health Engineering

Departmental activity in the fundamental public health field of environmental sanitation includes both the carrying on of direct programs, administered through the Public Health Engineering Division, and assistance to provincial programs through the General Public Health Grant.

The programs administered by the Department are concerned with the control of those phases of environmental sanitation which may affect the health of persons travelling by, and operating personnel of, railway, ships, and airlines; persons visiting national parks and other federal property such as airports; and federal employees. In addition, the department is responsible for the enforcement of international requirements governing the handling and shipping of shellfish. Federal legislation authorizing this work is contained in a number of acts, notably the Department of National Health and Welfare Act, 1944, with particular reference to Section 5(a), (d), (e) and (f), The Public Works Health Act, and in regulations concerning water for drinking and culinary purposes on common carriers, and the inspection and supervision of the handling and shipping of scallop meat.

Generally, Departmental activities involve the supervision of water supplies owned by common carriers, such as railways, or by the federal government; ice supplies used by railways for chilling food and drink; sewage and the disposal of sewage, garbage and other wastes on federal property; sanitation on the right-of-way of inter-provincial and international railways, including stations, bunkhouses, work camps and restaurants; working conditions in federal offices, including questions of lighting, ventilation, and space; sanitary conditions affecting shellfish growing areas in the Atlantic provinces; sanitation in shellfish shucking plants; and pollution of boundary waters between Canada and the United States.

The conduct of this work, which requires a broad knowledge of engineering practices and treatment methods, involves the use of sanitary surveys and examination of sources of supply, treatment processes and control methods. When requested, designs of sewage disposal plants and water treatment plants are prepared, including the necessary plans, and, in some instances, construction is supervised. By collecting and submitting samples for analysis, a constant check is maintained on the quality of water supplied to the public on common carriers and on federal prop-

erty. Sanitation problems in the Yukon and Northwest Territories, including problems caused by mine tailings and stack fumes and concerning water supply and sewage disposal, constitute an increasingly important part of this work.

The Department's activities involve active co-operation with officials of provincial health departments, the United States Public Health Service and numerous committees and organizations concerned with problems of mutual interest. Federal departments such as Fisheries, National Defence, Public Works, Transport, Veterans Affairs, Citizenship and Immigration, and Agriculture, are assisted in problems arising in connection with different aspects of public health engineering.

By agreement between the Department, the Department of Fisheries, and the United States Public Health Service, requirements governing the taking, handling and shucking of shellfish for export to the United States have been established and are used as a guide in the administration of control measures in the shellfish industry. Certificates for the export of shellfish are issued when compliance with these requirements is obtained.

Some major activities during the year included 479 sanitary surveys of water supplies, ice supplies, shellfish growing areas, etc.; the collection of 6,234 water samples for analysis; 764 examinations of railway property, including stations, bunkhouses, work camps, coach yards and restaurants; and 80 examinations of sewage treatment plants, to check the efficiency of operating procedures and control.

The addition of several professional engineers to the staff of the Department has resulted in a considerable increase in the volume of work which can be handled, and better control of sanitation in several fields, particularly in the shellfish industry, but many problems still require more attention than it has yet been found possible to devote to them.

WELFARE BRANCH

INTRODUCTION

The main divisions of the Welfare Branch are those of Family Allowances, Old Age Pensions, and Physical Fitness. As Family Allowances is a federal program, the division has full responsibility for its administration. Old Age Pensions and Physical Fitness are joint federal-provincial programs and the Departmental divisions are responsible for its administration. Old Age Pensions and Physical Fitness are joint federal-provincial programs and the Departmental divisions are responsible for the federal participation in them.

The Welfare Branch expenditures were as follows:

	<i>Administration</i>	<i>Net Benefits</i>
Welfare Branch	\$ 30,116.51	
Family Allowances	1,811,854.01	\$309,465,460.52
Old Age and Blind Pensions	77,937.23	103,169,114.54
Physical Fitness	70,011.87	150,675.42
Schools of Social Work		52,500.00
Total \$414,827,670.10	<u>\$1,989,919.62</u>	<u>\$412,837,750.48</u>

The highlight of the year was the development in the field of Old Age Security. The increasing volume of requests for changes in the provisions of the present act, particularly the means test and the age limitation, led to the appointment of a Joint Committee of the Senate and House of Commons on Old Age Security on which all parties were represented. Officials of the Department worked closely with this committee for over three months and were available at all sessions. They prepared the basic documentation and assisted in preparing the factual part of the committee's report. New legislation based on the recommendations of the committee was not introduced until after the period under review.

Additional responsibility was assumed with the transfer to the Department in February, 1951, of Civil Defence. There had already been set up in the Welfare Branch, under the Director of Family Allowances, Mr. R. B. Curry, a section for Civil Defence Welfare Planning. Mr. Curry was also appointed chairman of a civil defence Welfare Advisory Committee created to draw on welfare experience outside the Department. Mr. S. J. Bailey returned to the Department as administrative officer, Civil Defence Welfare Planning, and preliminary work was undertaken on a pamphlet dealing with the organization and co-ordination of provincial and local welfare aspects of civil defence. This will be the first of a series of pamphlets, later ones to deal with a number of specific problems.

The Welfare Branch continued to administer the Departmental grant to the eight Canadian schools of social work, made to assist the schools in relieving the shortage of trained social workers. The grant for the fiscal year was \$52,500.

At the request of the National Conference on Personnel in Social Work, approval was given for the conduct by the Department of a survey of the effective demand for social workers. The purpose of this survey was to assist the schools of social work in planning their training and to

aid the public and private agencies employing social workers in their staff development.

An amendment to the Excise Tax Act, passed in 1950, provided for the exemption from sales tax of public institutions devoted to the care of children, the infirm and the aged, if they were certified by the Minister of Health and Welfare to meet the requirements of the Act. This was in line with the certification of hospitals for exemption which is carried out by the Health Branch. Since the exemption became effective on July 1, 1950, 240 institutions have been certified and 129 applications have been refused because the institutions were unable to meet the requirements of the Act.

The Branch once again provided Canadian representation to certain United Nations organs. The Deputy Minister of Welfare, Dr. George F. Davidson, was alternate delegate at the tenth session of the Economic and Social Council held in New York, February 7 to March 6, 1950, and the eleventh session held in Geneva, July 3 to August 17. The Director of Family Allowances, Mr. R. B. Curry, was alternate delegate to the sixth session of the Social Commission held in New York from April 3 to May 5, 1950. Canada was rapporteur for this session. The executive Assistant to the Deputy Minister of Welfare, Mrs. D. B. Sinclair, was an alternate delegate on the Canadian delegation to the Fifth General Assembly in New York from September 19 to December 13, 1950. She was also the Canadian representative to the International Children's Emergency Fund and attended three sessions of the Program Committee and three of the Executive Board, all of which were held in New York. She served as chairman of the Program Committee in 1950, and was elected chairman of the Executive Board for 1951.

The Welfare Branch continued its responsibility for arranging programmes for officials awarded United Nations social welfare fellowships for study in Canada. There was one each from Chile, France, India, Japan and the Netherlands.

Representation was provided to certain interdepartmental committees. These include the Interdepartmental Advisory Committee on Immigration and its Sub-Committee on Migration Policy, the Interdepartmental Committee on Old Age Security, and the Interdepartmental Group on Technical Assistance which deals with Canadian participation in the Colombo Plan and United Nations Technical Assistance in connection with requests for experts and scholarship and fellowship programs.

FAMILY ALLOWANCES DIVISION

The Family Allowances Act became effective in August 1944 and payments were made in July 1945 to 1,237,754 families on behalf of 2,956,844 children. As at the 31st March 1951, 1,910,192 families were in receipt of allowances on behalf of 4,367,391 children and total disbursements for the year were \$309,753,855 (see Table 23, page 124) bringing the total expended since the program has been in force to \$1,561,773,766.

Of the total number of children registered for the allowances during the fiscal year ended March 31, 1951, 263,083 registrations were by families already in receipt of family allowances on behalf of other children, and 164,536 were by parents applying for the first time. Although the number of applications received in the fiscal year 1950-51 was somewhat less than that received in the year 1949-50, the overall number of families and children in pay continues to increase.

There are several reasons for this increase:

- (a) The birth rate in recent years has been higher than it was in 1933 and 1934. Consequently, the number of applications during the year for new-born children was greater than the number of children going out of pay because they had reached their sixteenth birthday.
- (b) Increased immigration.
- (c) New applications have been submitted by persons in the higher income group who have realized that it is to their advantage to receive Family Allowances.

It will be seen from Tables 24 and 25 (pages 125 and 126) that the increase in families and children was built up gradually through the last twelve months with no notable increase in any one month, and that the average allowance per family and child as at March 31st, 1951, was \$13.72 and \$6.00 (Table 29, page 130) respectively, as compared to \$13.64 and \$6.01 respectively in the previous year. The disbursements for March 1951 were \$26,215,554 (Table 23, page 124), almost \$1,000,000 more than in March 1950.

With the increase in immigration and the continued high post-war birth rate, a further increase in children, families and expenditures can be anticipated in the coming year.

Office Organization

The situation with regard to accommodation in Regional Offices remained unchanged and, with the exception of New Brunswick, is quite satisfactory. However, the new Federal building in Fredericton is fast nearing completion and the problem of space there will be solved when the move to new quarters takes place early next fall.

The Organization and Methods Branch of the Civil Service Commission completed office surveys in the Toronto and Quebec Regional offices and submitted detailed reports of their findings and recommendations. These reports, aside from containing much valuable information concerning administrative details and procedures, also give an outline of new work methods as well as scientific details on the flow of work. They are being carefully studied and already a number of the recommendations made have been put into effect with good results.

It had been felt for some time that the maintenance of identical indexing systems by both Treasury and Administration was unwarranted; tests were conducted in the Regional offices at Fredericton and Edmonton, the results of which have clearly shown that this is so. The use of a dual

system was first made necessary because of a number of reasons among which was the fact that Treasury and Administration could not be accommodated in quarters permitting easy joint operations. The public has become better acquainted with the type of information that is required in connection with names and addresses and changes affecting these and, consequently, the problems of indexing have been reduced considerably. Treasury officials have therefore agreed to dispense with the maintenance of their index in the Edmonton office and similar action will be taken in the Toronto and Fredericton offices as soon as the installation of an inter-communication system between the "Index" unit and other main units in both Treasury and Administration is completed. The indexing system presently in use by Administration is completed. The indexing system presently in use by Administration will from then on serve Treasury as well and will be staffed by clerks from both divisions. This will result in a saving of personnel, indexing equipment and materials.

Several Regional Directors have reported that the congestion in their respective Central Registries is becoming a problem and makes it difficult to operate efficiently. Terminated files are increasing rapidly and present a storage problem; for these reasons they recommend the destruction, as soon as possible, of dead records at least for the year 1945-46. The matter is presently under study by the National office and it is expected that some solution will be arrived at shortly.

Staff

During the past year efforts have been continued to organize the work of the Regional offices in such a way that the best and most efficient use is made of personnel. This has involved special studies of the work to be done and the staff requirements for this work. Through the co-operation of Regional Directors much progress has been made in seeing that the numbers and classifications of persons employed are best suited to the work of the office concerned. In some instances a reduction in staff was effected and in other cases there was a reclassification of personnel. The Organization Branch of the Civil Service Commission conducted staff surveys in the Regional Offices in Prince Edward Island, Nova Scotia, New Brunswick, Manitoba, Saskatchewan and British Columbia. These surveys have been most helpful and have made possible the securing of permanent appointments for an increased number of employees. In this connection, permanent positions for the entire division now total 406 as compared to 244 a year ago, an increase of 66%. This progress has had a very good effect on the morale and efficiency of employees generally.

It will be seen from Table 22 (page 123) that in the course of the last fiscal year the total number of established positions was reduced from 757 to 740; on the other hand the number of unfilled positions increased from 32 in March 1950 to 46 in March 1951; therefore, the actual number of persons employed as at 31st March 1951 was 694 as compared to 725 a year ago. This substantial reduction was made possible through the continued progress in the standardization and refinement of office procedures and this, in spite of the steady increase in the workload throughout the regional offices. Reductions in staff have been constant throughout the year with the result that the Division is already in line with the recently announced policy of the Government in the matter. Endeavours to reduce staff further will be continued and it is expected that a substantial percentage of the 46 positions that were vacant on the 31st March last will be abolished within the next year.

Some Regional offices have instituted a procedure whereby the staff is rotated periodically from one section of the office to another with individual reallocation of duties. This enables the employees to become familiar with all phases of the work and allows at the same time for general increased efficiency. It is proposed to make this part of the general procedure in all Regional offices.

Although there was no change in staff at the senior level, the last fiscal year saw several changes in the professional class of Social Workers. Supervisors of Welfare Services were appointed for the first time in Newfoundland and Prince Edward Island and resignations made necessary the appointment of new Supervisors in British Columbia and Alberta, and of Social Workers Grade I in Nova Scotia and Ontario. Additional Social Workers were appointed in Quebec and British Columbia, but there still exist vacancies at the Grade I level in Saskatchewan, New Brunswick and Alberta. The serious dearth of qualified Social Workers in the country as a whole is a problem not only for this Division, but for all social agencies; however, with the ever-increasing enrolment in the Schools of Social Work and the better range of salary now being offered by the Government to candidates in this field, the situation should improve in the next year or so.

Publicity

During the year a number of inserts were mailed with the Family Allowances cheques reminding parents of their responsibilities in connection with the continuing eligibility of their children for the allowance and inviting their co-operation in such matters.

A booklet entitled "You and Your Family" was produced over a year ago. It contains three main sections; the first discusses "Family Allowances", giving pertinent facts in an interesting manner; the second deals with spending the family income and the third section contains general information concerning the bringing up of children, such as public health services, diet, and first aid hints. The booklet is sent only on request of the family interested. As at 31st March 1951, some 475,000 booklets had been distributed in all provinces except New Brunswick, Manitoba and Saskatchewan. In these provinces distribution will be completed within the next few months. The demand to date exceeds expectations and represents 25% of the Family Allowances recipients in the provinces covered.

Regional Directors have been making constant use of the film strip "Speaking of Family Allowances" as a means of educating the public on the various phases of the legislation and in particular as to the manner in which the allowances can be used to advantage for the betterment of Canadian children.

Conferences

It had been the custom each year to hold two conferences at Ottawa; one attended by Regional Directors and the other by Supervisors of Welfare Services. These conferences were very valuable and aside from providing an excellent opportunity to discuss mutual problems of administration or to review certain policies and procedures, they made for uniformity in interpretation and practice. However, it was felt that the time had come where these conferences could be held at less frequent intervals and therefore only the Regional Directors' conference was convened in the last fiscal year; the Welfare Supervisors' conference will be

held shortly. A substantial saving in funds will result from the spacing of these conferences at intervals of 18 months instead of holding them annually.

Costs of Administration

The cost of administering the program during the 1950-51 was \$4,316,024, slightly more than in the previous year when it was \$4,255,160. The upward adjustments in salaries, together with the increase in costs of services generally account for the difference. It should be noted, however, that in relation to \$309,753,855 paid out in Family Allowances, the cost of administration is 1.39% as compared to 1.45% the preceding year. As to the breakdown, the cost to the Department of National Health and Welfare is \$1,811,854, to the Department of Finance (Treasury) \$2,322,883, and to the Department of Public Works \$181,287. The cost to the Treasury includes \$895,156 for the postage charges in the mailing of the monthly cheques.

Overpayments

In a program involving annual expenditures of some \$300 million dollars to families numbering close to 2 million, overpayments are inevitable because of the several eligibility requirements involved. Some of the more typical reasons why overpayments are created are:

- (1) Parents cease to maintain their children as required;
- (2) A child may have been improperly absent from school;
- (3) A child may be gainfully employed;
- (4) A parent may fail to report the death of a child;
- (5) A child may have ceased to reside in Canada.

Total overpayments as at 31st March 1951 for the entire period since payments first commenced in July 1945, stood at \$438,401 as compared with \$451,174 a year ago, a net reduction of \$12,772 (see Table 31, page 132). A review of Table 32 (page 132) will show that, as was the case in past years, the main causes of overpayments in order of frequency as to number of cases and in order of volume in terms of money, were: (a) children working for wages; (b) children not in attendance at school, and (c) non-maintenance by parents; in other words, these three categories account for 75% of all cases and 55.6% of the total amount overpaid in the last fiscal year. Two factors that deserve mention here are first, the noticeable decrease during the past year in overpayments resulting from birth date errors; this is accounted for by the fact that birth verification is now on a current basis in all provinces. Secondly, the rather substantial increase in overpayments as the result of deceased children and about which an explanation is given under "Verification of deaths".

In the past year new overpayments discovered amounted to \$449,644 (see Table 33, page 133) as compared with \$611,335 the year before: on the other hand, collections were \$462,417 as against \$589,556. The significant drop in new overpayments is the result of a number of factors, such as the better co-operation on the part of parents in notifying Regional Directors of non-entitlement; more adequate means for determining children who are employed for wages and the decrease in duplicate payments now that birth verification is on a current basis.

Of the total overpayments outstanding as at 31st March 1951, i.e. \$438,401 (see Table 30, page 131), close to 30% or \$129,369 is being recovered currently from active accounts and \$231,805 or 53% is recoverable from parents whose accounts have terminated; the remaining \$77,226 is considered uncollectable. The total amount outstanding is made up of

overpayments set up since the program came into force on the 1st July, 1945, and when considered in relation to the one and one half billion dollars paid out, represents only 0.028%. It is difficult to forecast what the situation will be with regard to overpayment in the future; however, the officers of the Division expect that the balance of overpayments will not increase from its present figure.

Verification of Deaths

In the early years a substantial number of overpayments arose because of long delay or neglect on the part of parents in notifying Regional offices of the death of a child. Through the co-operation of the Dominion Bureau of Statistics, a system was devised whereby the Provincial Registrars of Vital Statistics supply the Regional Directors of Family Allowances in their respective provinces with either weekly, semi-monthly or monthly lists (depending on the local arrangements) of current deaths of children under sixteen. Through this system, which in some provinces has been in effect since as far back as early 1948, it has been possible to eliminate practically all of the overpayments in the category mentioned.

There remained however the problem of verifying all deaths of children under 16 that had occurred in the years prior to that in which the above mentioned system was inaugurated. Therefore, by arrangement, the Dominion Bureau of Statistics supplied the Regional offices with individual death notice cards with the names of all those children under 16 who had died since 1929. This involved close to half a million cards which had to be checked individually against the related Family Allowances file or corresponding Treasury Visi Record and by the 31st March 1951 this task was completed in all but three Regional offices where only approximately 15% of the job remains to be done. So far, total overpayments discovered through this check amount to approximately \$60,000. A substantial portion of these overpayments has already been recovered.

Birth Verification

The balance of unverified births as at 31st March 1951, was 116,569 as compared to 156,821 a year ago (see Table 34, page 135). The large decrease is accounted for by the fact that the Regional offices in Quebec and Newfoundland have now reached the position of other offices in having only current births to verify. It can be said therefore that Birth Verification is no longer a problem. Birth Registration Indexes are supplied by the Dominion Bureau of Statistics some four to six months after the births occur; it follows therefore that there will be at any one time between 100,000 and 125,000 births awaiting verification.

School Attendance and Employment

The Family Allowances legislation provides that allowances are payable if the child is in satisfactory attendance at school in accordance with the laws of the province where he resides. Consequently, in all Regional offices arrangements exist whereby local educational authorities supply reports of unsatisfactory school attendance. When such a report is received, Family Allowances are suspended until the child's attendance again becomes satisfactory.

For those children who are not required to attend school as, for example, children who are over school leaving age, allowances are paid provided the child does not work for salary or wages. If a child over school leaving age is reported to be working for wages, the allowances are suspended for the period of such employment. Arrangements have

been made with the Unemployment Insurance Commission to report children who begin to work. Also, since some children are in types of employment which are not covered by unemployment insurance, reports are sometimes received directly from the employer. Finally, in some provinces a questionnaire is sent once or twice a year to parents of children who are of school leaving age and this serves as a check on the eligibility of the child in respect to school attendance and employment. This system was inaugurated in one Regional office two years ago and in the past year a number of other Regional Directors have made similar arrangements. The results obtained have been such that consideration is now being given to making this a general procedure for all offices.

Table 35 (page 136) shows the number of children for whom allowances were suspended for the years 1949-50 and 1950-51. This table also indicates the number of children for whom allowances were reinstated after a period of suspense. It will be noted that the total number of children for whom allowances were suspended rose from 33,373 in 1949-50 to 36,845 in 1950-51. It should be pointed out that reports of considerable numbers of children thus suspended may reflect the success of the local Regional office in developing procedures to determine such cases fully and promptly.

One factor which influences the number of cases reported to the Regional office for unsatisfactory school attendance or juvenile employment is that the school leaving age differs from province to province. In those provinces where the child leaves school at an earlier age there is, of course, more juvenile employment of children under sixteen and Family Allowances payments are affected thereby.

It is increasingly apparent that the general public is better informed with regard to the provisions of the Family Allowances legislation in respect to these matters. This is due in part to the publicity efforts of this Department, through such means as cheque inserts, films, radio addresses and so forth.

There have been many indications that Family Allowances have played an important part in improving school attendance. Reports issued by a number of provincial school authorities show that there has been a steady improvement in school attendance since the inception of Family Allowances. While there may be other factors which have contributed to the improved attendance, responsible officials have stated that, in their opinion, one of the chief reasons for the improved attendance has been the introduction of Family Allowances. It is significant to note that certain provincial educational authorities report not only an increase in school attendance since Family Allowances began, but also a decrease in the number of prosecutions which have been undertaken by the province for cases of improper absence from school.

The effect of Family Allowances on school attendance has been twofold. First, the withholding of allowances in case of unsatisfactory attendance is an incentive for parents to see that the child returns to school, and, secondly, the receipt of Family Allowances in many cases has enabled parents to provide more suitable food and clothing which in turn has enabled them to keep the child in school. This is borne out by a decrease in some provinces in the number of work permits that the school authorities are called upon to issue. It is also interesting to note that in many cases the payment of allowances has meant that parents are able to keep their children in school after the child has reached the school leaving age and is no longer required by law to attend.

Prosecutions

Appropriate action has been taken in the Courts to prosecute those who obtain Family Allowances fraudulently. During the year which ended March 31st, 1951, prosecution was initiated in fifty-six cases. In twenty-seven of these the action was completed (as compared to twenty-two completed prosecutions in 1949-50). Four cases were abandoned for reasons such as mental illness or death of the defendant. The remaining twenty-five cases were not yet concluded on March 31st. Table 36 (page 137) shows the total prosecutions since the inception of Family Allowances and Table 37 (page 137) those prosecutions which occurred in the year 1950-51. In two instances there were two persons prosecuted for offences arising out of the same account.

The largest category of prosecutions arose from duplicate application for Family Allowances. Other cases were the result of such factors as: parent failing to maintain the child; application for a non-existent or deceased child; or the receipt of allowances for a child who is living outside of Canada. The following is a comparison of the incidence of these types of prosecutions (in completed cases) between 1949-50 and 1950-51.

	1949-50	1950-51
1. Duplicate Application	7	10
2. Non-maintenance	9	8
3. Non-existent or deceased child	5	6
4. Non-resident of Canada	1	3
	<hr/>	<hr/>
Number of completed cases	22	27

The completed prosecutions to date have been made under Section 14 of the Family Allowance Act which provides penalties for obtaining Family Allowances fraudulently. Most of the charges have been under Section 14(1) (c) which applies to the cashing of any cheque for an allowance to which the payee is not entitled. In a few of the cases now under consideration action is contemplated under the Criminal Code rather than under Section 14 of the Act.

The number of prosecutions originating in each Regional office is as follows:

	1st Apr. 1947 — March 31, 1951 (No prosecution was undertaken prior to April 1, 1947)	1st Apr. 1950— Mar. 31, 1951
Quebec	62	40
Ontario	16	11
Alberta	5	1
New Brunswick	3	2
Nova Scotia	3	1
British Columbia	3	0
Saskatchewan	1	1
Manitoba	0	0
Prince Edward Island	0	0
Newfoundland	0	0
Yukon & N.W.T.	0	0
	<hr/>	<hr/>
	93	56

A number of prosecutions in the province of Quebec have been caused by the delay in birth verification in that province. Now that birth verification is on a current basis it is expected there will be a decrease in those prosecutions arising out of factors such as duplicate accounts and fictitious children.

It is noteworthy that there have been so few prosecutions compared with the number of payees in receipt of Family Allowances. For example, the fifty-six prosecutions under consideration in 1950-51 represent only one case out of every 33,000 accounts in pay.

Transfers Between Provinces

Transfers from one province to another of families in receipt of Family Allowances numbered approximately 32,800 during the fiscal year ended 31st March 1951. A review of Table 38 (page 138) will show that there continues to be a larger number of families moving into the provinces of Ontario, Alberta and British Columbia than those leaving. This is partly due to increased activity in industrial expansion and better opportunities for employment in the provinces mentioned. All other provinces showed a greater number of families leaving than coming in with the most marked losses being in the provinces of Saskatchewan, New Brunswick, Newfoundland and Nova Scotia. This information is helpful to a number of organizations and agencies in assessing population shifts, demands for housing and other social and economic conditions throughout the country.

Welfare Services

All cases in which social problems are involved are referred to the Welfare Section in each Regional office.

Sources from which cases come.—During the fiscal year ended March 31, 1951, a total of 20,220 such cases were referred. Of these, 10,729 originated in administrative units during the process of studying eligibility; 4,605 were brought to attention by the families themselves or by their close relatives; 3,638 were referred by social agencies; 1,152 by private individuals, and 96 from other miscellaneous sources.

Types of problem involved.—In 6,300 cases the problem grew out of the break-up of the home, mostly involving a claim on the part of each parent for Family Allowances; 3,801 cases were concerned with the eligibility of families living as a family unit but with some social problem complicating the situation from a Family Allowances point of view; 5,347 cases had to do with lack of birth verification; 1,833 with reports that Family Allowances were not being expended for the purposes intended; 487 with non-attendance at school caused by social problems; and 2,714 with other miscellaneous social problems in relation to Family Allowances.

Misuse of Family Allowances.—From the outset the Department has held firmly to the view that the mothers of Canada as a group could be trusted to see that their children got the additional advantages that Family Allowances were intended to ensure. This trust appears to have been amply justified. For example, in the twelve-month period ended March 31st last, only 1,833 cases of misuse were reported from all sources and investigation showed that 1,462 were unwarranted reports, leaving only 371 bona fide cases of misuse, or approximately one per 5,000 families. In these cases Family Allowances to the parent were suspended and ar-

rangements made for payment to a suitable relative or friend, if available, otherwise through an agency or a carefully selected local citizen.

Bona fide child-placing agencies may, of course, qualify as “parents” for the children entrusted to their care, in which case they receive and expend Family Allowances for these children, operating within the framework set up by the Department involving banking, accounting and auditing. While it has been necessary in some areas to have investigations made by Family Allowances social workers, the general policy has been to seek the co-operation of local social agencies, both public and private, and they have given extensive and invaluable service. In the fiscal year ended March 31, 1951, 2,413 such investigations were made through the Provincial Departments of Welfare, and 2,004 through other welfare agencies. For each completed investigation conducted by a public or private agency, a fee of \$5.00 was paid at a total cost of slightly over \$22,000. In addition, 2,517 home investigations were made by Family Allowances social work field staff, mainly in areas where local welfare services were not available.

Indians

Registration of an Indian child for Family Allowances is made on a special form provided for that purpose and is completed by the Indian Superintendent who forwards it to the Regional Director of the province in which the parent lives. At the time of registration and subsequently, the Indian Superintendent provides the Regional Director with information regarding eligibility of the child and recommends the method of payment.

The majority of Indian families receive their Family Allowances by cheque direct to the Indian mother. If the Indian Superintendent considers that a certain degree of supervision is necessary, the cheque is addressed to the Indian payee but is sent in care of the Indian Agency office; this method of payment enables the Superintendent to give some guidance in the spending of the allowance. A small number of accounts are administered through the Indian Agency trust account. Finally, where, because of the mode of living, it is considered advisable, allowances may be paid wholly “in kind”. In this method of payment the Indian Superintendent issues vouchers to traders authorizing the supply of certain approved items such as children’s clothing and foods which will be of benefit to the children.

The following table shows the number of Indian families registered for Family Allowances as of December 31, 1949 and December 31, 1950:

	December 31, 1949		December 31, 1950	
(a) Cheque direct to the payee	14,390	73.2%	14,934	74.6%
(b) Cheque direct to the payee mailed care of the Indian Agency Office	2,526	12.9%	2,296	11.5%
(c) Administered through Indian Agency Trust Account	284	1.4%	454	2.3%
(d) Allowances in kind	2,459	12.5%	2,330	11.6%
TOTAL	19,659	100.0%	20,014	110.0%

There were 57,587 children in the 20,014 families receiving allowances as of December 31, 1950.

It has been the policy of the Indian Affairs Branch, Department of Citizenship and Immigration, to encourage the payment of Family Allow-

ances by direct cheque in all cases where the Indian Superintendent considers the family is able to expend the allowances so received for the benefit of the child. This policy had led to a reduction in the number of families paid in kind from 12.5% as of December 31, 1949, to 11.6% on December 31, 1950. The majority of the accounts now being paid in kind are in the provinces of Ontario and Quebec and in the Yukon and Northwest Territories.

During the year 1950-51 a revised registration form was introduced which made provision for the inclusion of the band and band number of the payee and which emphasized the importance of the Indian parent dealing directly with the Indian Superintendent on all matters concerning Family Allowances. Also, during the year, in collaboration with the Indian Affairs Branch, an "award" letter was prepared which is sent to every Indian applicant for Family Allowances who is to be paid by direct cheque. This letter gives the payee certain information regarding the setting up of the account, the amount of payment, changes in rates, eligibility factors such as maintenance and school attendance, and finally, it advises the Indian payee to inform the Indian Superintendent of any change in status which will affect the account.

It is the opinion of the Indian Affairs Branch that Family Allowances have been a very important factor in the continued improvement noted in school attendance and enrolment records. Reports from the Indian Affairs Field Staff continue to indicate that the payment of Family Allowances is making a substantial contribution to the better health of Indian children generally.

Eskimos

Responsibility for the distribution of Family Allowances to the Eskimos lies with the Department of Resources and Development, which department is concerned with the general administration of Eskimo affairs. As at March 31st, 1951, there were 1,608 families with a total of 3,648 children in pay as compared to 1,589 families and 3,534 children at the end of the previous year. Although the numbers are small, there are difficult problems involved in administering family allowances to the Eskimo people, for they are scattered over thousands of miles of Canada's northern coastline and throughout the Barren Lands.

Cheques are not issued to them; rather they are allowed to buy certain specified items under the supervision of District Registrars, usually Royal Canadian Mounted Police officers. Powdered milk and approved baby cereals are considered as semi-compulsory issues and other nutritious foods are gradually being introduced. Besides food, the purchase of children's clothing accounts for much of the Family Allowances credit. Miscellaneous items, such as rifles, boats and other hunting and fishing equipment is allowed in those cases where a reasonably large credit has accumulated, thus increasing the capacity for self-reliance.

Although the Eskimos represent only a small group, their special problems are being considered carefully, and reports indicate that the Family Allowance credits are beneficial in their effect and are directed for the most part towards the well-being of the children.

OLD AGE PENSIONS

The agreements made by the Government of Canada with the ten provinces and the Yukon Territory prior to April 1, 1950 continued in

force during the fiscal year 1950-51. The Order in Council approving the scheme for the administration and payment of pensions in the Northwest Territories also remained unchanged.

The maximum pension paid in all parts of Canada was \$40 a month. As from April 1, 1950 the maximum pension in Newfoundland was increased from \$30 to \$40 a month. In Newfoundland, as elsewhere in Canada, the maximum amounts of income allowed were the amounts specified in the Old Age Pensions Act.

There were no amendments to either the Old Age Pensions Act or the Old Age Pensions Regulations. At the close of the fiscal year there were 302,173 pensioners as compared with 282,584 at the close of the fiscal year 1949-50. Due to the greater number of pensioners and the increased amount of maximum pension authorized by the amendments to the Act in 1949 Federal Government expenditure was considerably higher than for the previous fiscal year. The expenditure for 1950-51 was \$99,268,005.53 and for 1949-50 it was \$89,652,203.32.

Parliamentary Committee on Old Age Security

The Joint Committee of the Senate and the House of Commons on Old Age Security examined Canada's present provisions for the aged and also made a serious study of the plans of a number of other countries. The report of the Committee was presented to Parliament before the end of the 1950 Session and later in the year was discussed with provinces at a Federal-Provincial Conference. Briefly, the Committee recommended that pensions at the rate of \$40 a month financed solely by the Federal Government be paid to all persons over the age of 70 years subject only to a residence requirement. In addition the Committee recommended that pensions of up to \$40 a month subject to a means test, in some respects similar to that which exists under the present plan, be provided for persons 65 to 69 years of age. The recommendation stipulated that pensions of the second type be financed on a 50-50 basis by the Federal Government and the provinces. At the close of the fiscal year 1950-51 final agreement had still to be reached on the amendment to the British North American Act which was required to permit legislation of the type recommended by the Committee.

Pensions for Blind Persons

The agreements with the provinces completed prior to April 1, 1950 and the Order in Council approving the scheme for the administration of pensions in the Northwest Territories deal with pensions for blind persons as well as old age pensions. The maximum pension of \$40 a month was paid to blind pensioners in all parts of Canada during the fiscal year 1950-51. The amounts of allowable income specified in the Old Age Pensions Act were provided for in each agreement.

There were no amendments to the Act or Regulations affecting pensions payable to blind persons. The number of pensioners increased from 10,517 as at March 31, 1950, to 11,198 as at March 31, 1951, and Federal Government expenditure from \$3,536,730.97 for the fiscal year 1949-50 to \$3,901,109.01 for the fiscal year 1950-51.

Tables 39 to 42 (pages 139 and 140) show the amounts paid by the Government of Canada to the Provinces and to the Yukon Territory for Old Age Pensions and Pensions for Blind Persons with relevant statistics as at March 31, 1951; also, amounts paid by the Government of Canada to old age and blind pensioners in the Northwest Territories.

PHYSICAL FITNESS DIVISION

The Physical Fitness Division continued to act as the agency for administering the fitness and recreation services made available under the terms of the National Physical Fitness Act. The National Director, Mr. Ernest Lee, who, in addition was the Chairman of the National Council on Physical Fitness, resigned in December 1950. The position was vacant at the end of March 1951.

During the fiscal year 1950-51, the provinces of Alberta, British Columbia, Manitoba, New Brunswick Nova Scotia, Ontario, Prince Edward Island, Saskatchewan and the Northwest Territories co-operated with the federal government under the terms of the National Physical Fitness Act.

Administration

The Division continued to provide a variety of professional consultative and informational services for the assistance of provincial government departments and national organizations. It acted as a clearing house for the dissemination of information on recreation, fitness, physical education, community centres, drama, sports, the organization and administration of community and specialized programs, and related matters. The actual organization and direction of recreation and fitness projects continued to be a provincial and local responsibility and consequently the Division did not operate an activity program. Close liaison was maintained with other countries and with the Commonwealth in particular, thus facilitating an exchange of publications and information on the latest developments abroad.

Informational Materials

Some of the more important publications and reports produced by the Division during the year were:—Equipment for Outdoor Play, Pre-School Play Areas, Simplified Staging, Featuring Fitness (a bibliography of materials currently available), Coaching and Officiating Clinics, Schools and Courses in the Provinces of Canada—1950, Facilities and Programs for the Utilization of Industrial, Commercial, and Agricultural Workers' Spare Time and Annual Holidays, Financial Operation of Community Centres, Proceedings of the Third Conference of Sports Governing Bodies, Sports and Athletics in Other Countries (Vols. 1, 2, and 3 combined), Prelude to performance, Report on the First Canada Wide Survey of Municipal Recreation.

During the year, nine blocks of visual aids totalling 45 titles (27 films, 10 filmstrips and 8 loop films) were circulated within the provinces. On completion of the circuit, visual aids were deposited with the Canadian Film Institute on extended loan for general rental at a minimum service charge. As a result of the preview service, existing film libraries have been extended and new libraries established on a cooperative basis.

During the year, one new film "On Stage" and a stagecraft series of three filmstrips have been produced. "On Stage" is designed to be of assistance to groups in small communities and shows how a community group makes its first attempt to put on a play. The Stagecraft series of three filmstrips—"Simplified Staging", "Stage Settings" and "Simplified Stage Lighting" provides information on how to build, design and equip stage settings for small auditoriums and community halls.

NATIONAL COUNCIL ON PHYSICAL FITNESS

The Council met in Ottawa, April 3-5, 1950 and in Victoria, September 28-30, 1950. Following the resignation of the Chairman, Mr. J. H. Ross was elected as Acting Chairman of the Council.

In addition to standing committees, the following special committees have been set up by the Council;—Awards; Diploma Courses; Financing International Competition; Financial Policies; Fitness Tests, Training and Promotion; Folk Festivals; History of Physical Education and Recreation in Canada; Job Analysis; National Conference of Recreation Executives; R.C.M.P. Fitness Program; Scholarships; Simplified Rules for Team Games; Sports Governing Bodies.

Third National Conference of Sports Governing Bodies

The major achievement of the third Conference, convened in January 1951, was the organization of the Canadian Sports Advisory Council by the delegates of the Sports Governing Bodies who unanimously approved a constitution for the new body and elected provisional officers. The constitution was referred to each member body for ratification. On receipt of ratification, the officers-elect assumed office.

The Council's purpose in calling these Conferences was to provide for a meeting to be held in a neutral atmosphere and by so doing, furnish an opportunity for the Sports Governing Bodies to discuss the various problems connected with sports. The establishment of the Canadian Sports Advisory Council brings to fruition a project on which the Council has worked for three years.

Scholarships

On the recommendation of the National Council on Physical Fitness, scholarships ranging from \$500.00 to \$850.00 and totalling \$4,000.00 were awarded for post graduate studies in the field of Physical Fitness and Recreation.

The recipients were: Mr. W. F. Clayson, University of Toronto; Mr. George Grant, Greater Victoria School Board; Miss E. McFarland, Health and Recreation Branch, Department of Education, Alberta; Miss J. H. Ramsay, University of Western Ontario; Mr. H. Ryan, McGill University; Professor E. J. Tyler, Brandon College.

Recreation Survey

The National Council on Physical Fitness, in cooperation with the Canadian Federation of Mayors and Municipalities and the Parks and Recreation Association of Canada, conducted a Recreation Survey on a Canada-wide basis. Questionnaires were circulated to all cities of 10,000 and over and a selected group of cities, towns and municipalities under 10,000, and to selected rural areas. The report of the Survey deals with the administration of recreation, finance, program, capital expenditures, and facilities. This survey indicates that Canadians are spending much larger amounts on public recreation programs than had been estimated and that many of the smaller communities are now devoting an increasing proportion of tax funds to this purpose.

Leadership

The Council gave consideration to the fact that increased demand for trained leaders for small communities and rural areas revealed an acute shortage of suitable personnel. College graduates were not attracted by the salaries offered. The Council recommended that to meet the

needs of smaller communities and rural areas there should be established approved diploma courses requiring one year's study beyond secondary school graduation, which would provide recreation personnel with a type of vocational training comparable to that of a first-class teacher.

National Physical Fitness Act

The National Council on Physical Fitness requested the Minister to obtain from the Department of Justice an interpretation of certain sections of the National Physical Fitness Act because of the confusion which existed as to the advisory and executive powers of the Council. The opinions received from the Department of Justice interpreted the Act as giving certain executive powers to the Council. At the end of the fiscal year plans were under way to make the changes in administrative practice which the interpretation required.

ADMINISTRATION BRANCH

The Administration Branch of the Department consists of the following Divisions: Departmental Secretary's, Information Services, Legal, Library, Personnel, Purchasing and Supply, and Research. Because these Divisions serve the entire Department both at headquarters and in the field, new or increased activities in the Health and Welfare Branches of the Department have resulted in a greater volume of work for the Divisions of the Administration Branch. The continuing development of the National Health Program, additional responsibilities assumed in connection with the Joint Committee of the Senate and House of Commons on Old Age Security, and a general acceleration of the Department's other activities were reflected during the past year in the work of nearly all Divisions of the Administration Branch.

DEPARTMENTAL SECRETARY'S DIVISION

A striking increase in volume of work was handled during the past year by the Departmental Secretary's Division. This Division comprises the Accounts and Estimates Section, Central Registry Services, Correspondence Section, Duplicating Section, Stenographic and Typing Pool, and Parliamentary Papers Section.

In addition to the services regularly rendered by these Sections to the entire Department, numerous special projects were carried out. Included among these were the complete secretarial facilities made available by the Division to the Joint Parliamentary Committee on Old Age Security, the assistance given to the Deputy Minister of Welfare in organizing and administering the Public Service Division of the Ottawa Community Chests Campaign, the drafting of security regulations and the handling of all other matters related to security within the Department, and the organization within the Department of the Group Hospital-Medical Insurance Plan for the Federal Public Service.

A special feature of the work of Central Registry Services during the year was the establishment of new sub-registries in the Purchasing and Supply Division and in the Civil Defence Division, making a total of five sub-registries in addition to the Central Registry.

INFORMATION SERVICES DIVISION

Working in close collaboration and consultation with all Divisions of the Department in the many areas of public health and welfare in which the Department is pledged to support the Provinces, the Information Services Division continued to carry out an extensive program of informational and educational publicity. The prime purpose of the program is to develop and sustain public understanding and support of measures calculated to advance the nation's health and welfare standards.

During the past year the program covered such activities as mental health, child and maternal health, nutrition, dental health, industrial health, blindness control, venereal disease control, and family allowances. The media employed to carry it out included all the instruments of information and education—books, pamphlets, posters, displays, exhibits, films, filmstrips, outlets through the press and radio.

The Information Services Division produced over 4,000,000 pieces of printed health education material during the past year, largely for distribution through provincial departments of health, the Provinces placing them in the hands of medical officers of health and public health visiting

nurses and distributing them to local health units, well-baby clinics, and mental health clinics.

Press facilities were used extensively for news coverage of activities as well as for feature and photo stories.

Radio outlets continued to broadcast daily departmental spot announcements and health plays produced by the Division, such plays being used regularly, on a free "public service" basis, by 102 independent stations. One hundred radio dramas were produced during the year.

Periodicals issued by the Information Services Division included the monthly magazine "Canada's Health and Welfare", which last year contained bimonthly supplements on "Mother and Child", "Meals for Millions", "Blindness Control", "Heart and Arteries", and "Films and Filmstrips". Also produced were monthly issues of "Nutrition Notes", and "Industrial Health Bulletin". Two technical pamphlets were edited for the Industrial Health Division dealing with radiology and radioactive isotopes, as well as two issues of the "Industrial Health Review".

Publications included numbers of new reading and teaching aids, and large quantities of reprints of the Department's books and folders. New publications included the Mental Health Division's 208-page book, "Up the Years from One to Six", and a folder, "Preparing your Child for School", which added to the Mental Health Division's series of Child Training Pamphlets. A booklet was issued for the Dental Health Division on "Ten Little People and Their Teeth", and a teaching manual entitled "Good Habits for Good Teeth" was also produced. Work was begun on a booklet "Teen-Age Tooth Tests" and on a dental health manual for those engaged in teaching oral health.

A folder was issued for the Blindness Control Division on "Eye Trouble", and books on "Simplified Staging" and "Prelude to Performance" were printed for the Physical Fitness Division, while work went ahead on a fitness publication to be entitled "Posture's Important—When You're in Your Teens", the second in a series on the subject.

Completing the Nutrition Division's series of books on food service, publications were produced this year on "Large Scale Food Preparation and Care of Equipment", "Cook and Cookhouse", and "Purchasing and Storing Food for Workmen's Camps". The Information Services Division also arranged production for the same Division of loose-leaf books, "Nutrition Cards for Nurses".

A technical manual for physicians dealt with "Syphilis and Gonorrhea" and, also for the Venereal Disease Control Division, a booklet was prepared entitled "It's a Fact" for lay distribution.

It became necessary to reprint the booklet "Canada's Health and Welfare Program", describing health and welfare services in Canada, and also "What You Want to Know About Nursing", produced for the Canadian Nurses' Association.

Films and filmstrips were found to be increasingly valuable informational media and the Department's collection of such aids was augmented. The film, "Challenge: Science Against Cancer", produced last year by the National Film Board in collaboration with the Division and the United States health authorities, was shown widely and a theatrical version was issued this year for general distribution in both Canada and the United States.

Films entitled "Rural Recreation", "On Stage", and "Prelude to Performance" were arranged for the Physical Fitness Division and a filmstrip was made for that service on "Simplified Staging."

Work was carried forward in the Department's popular Mental Health film program. "Feeling of Depression", another in the "Mental Mechanisms" series, was completed and won the high praise of exhibitors and the public. Arrangements were made for the next in the "Ages and Stages" series, to be entitled "The Frustrating Fours and the Fascinating Fives" and a start was made on production of screen material on "Alcoholism", "Mental Hospitals" and on a "Mental Syndromes" series. A filmstrip dealing with the preparation of the child for school, to be entitled "Once in Wally's Lifetime", was also initiated for the Mental Health Division.

Filmstrips produced included "A Good Breakfast" and "What Breakfast Did for Emily" for the Nutrition Division, "Teen-Age Teeth" and "The Toothsome Tale" for the Dental Health Division, and the "Starlight Story" dealing with the anti-tuberculosis program of the Indian Health Services. Initial work was done on two strips for lay use by the Venereal Disease Control Division.

Exhibits were set up again this year as informational media at a number of large exhibitions, conventions and special gatherings, information officers attending to explain government measures and to distribute literature.

The Division's Biological Photographic Laboratory began during the year to set up a film radiation monitoring unit in connection with the Industrial Health Division's work associated with the handling of radioactive materials. The photographers developed techniques and equipment for such monitoring work, to be carried out in the laboratory.

LEGAL DIVISION

The work of the Legal Division involved services both of a legal and an administrative character.

Included in the former were matters pertaining to the statutes and regulations falling within Departmental administration, the preparation of contracts and agreements, the giving of opinions, and advising and assisting in prosecutions under the Food and Drugs Act, the Family Allowances Act, and the Opium and Narcotic Drug Act.

Substantial progress was made during the year in revising and consolidating various regulations including those under the Food and Drugs Act, the Quarantine Act, the National Health Program, and certain regulations under the Department of National Health and Welfare Act.

Amongst the administrative services performed by the Division were a number of matters for the Dominion Council of Health, participation in the work of the interdepartmental committee on Medical Benefits for Civil Servants, and in the international aspects of the food and drug law and administration.

LIBRARY

During the past year the Departmental Library continued with the acquisition and organization of reference and technical books, serial publications, pamphlets and government documents pertaining to all phases of the Department's work.

The removal of the Industrial Health Laboratory to a new building required the creation of a third branch library in Ottawa, the others being located at the Directorate of Food and Drugs Divisions and at the Laboratory of Hygiene.

Some work was started during the year on the recording and organization of library collections in Food and Drug Regional Laboratories.

In December the author entries from the master catalogue in the Main Library were copied by microfilm for inclusion in the Union catalogue of Canadian libraries to be maintained by the Canadian Bibliographic Centre so that their Union catalogue continues to have a complete author record of all the library collections of the Department.

PERSONNEL DIVISION

The Personnel Division continued to carry out its responsibilities with regard to problems of organization, creation of positions and the assignment, re-assignment and promotion of staff. It handled all matters respecting pay, attendance, leave, superannuation, induction, on-the-job training and other training needs as they arose. The Division represented the Department in all personnel matters, carrying on a continuous day-to-day relationship with the Civil Service Commission, Treasury Board staff, Comptroller of the Treasury and other government bodies. It also prepared submissions to the Governor General in Council and to the Treasury Board in connection with staff matters and handled claims for compensation under the Government Employees Compensation Act and the drafting of details of staff estimates.

The past year saw continued difficulty in the recruitment of sufficient staff in the specialist fields such as medical officers, nurses, scientific and technical personnel. There are still opportunities in the Department for employment of qualified persons of this type.

With reference to the government's policy respecting staff reductions, the Personnel Division attempted wherever possible to rearrange duties so that staff might be employed at their fullest capacity. Vacancies were filled by promotion or reassignment and the need for additional positions in expanding divisions was met by transferring positions from divisions in which work had diminished.

PURCHASING AND SUPPLY DIVISION

All divisions of the Department were serviced by the Purchasing and Supply Division in the procurement, provision and maintenance of office or other accommodation and the purchase and provision of furniture, equipment, general materials and supplies, including printing and stationery, for all departmental establishments. A central stationery stockroom was operated at headquarters.

The above activities involved contracting for and purchasing scientific equipment for laboratories, and medical equipment, food, and other supplies for hospitals, clinics and quarantine stations throughout Canada, the Northwest Territories, the Eastern and Western Arctic, the United Kingdom and some points in Continental Europe.

The Indian Health Services hospitals, nursing stations and health centres presented particular problems in supply due to their isolation and the difficulty presented by extraordinary methods of transportation. During the past year the Department of Transport's new ship, the "C. D. Howe", was introduced to the Eastern Arctic Service. The hospital equipment for the ship and numerous stations in the Eastern Arctic constituted a large initial cargo for her maiden voyage.

The efficient co-operation of the Royal Canadian Air Force was enlisted in forwarding medicines required in emergencies by settlements in northern localities.

The supply functions of the Division included the installation and maintenance of offices and establishments occupied by the Department in Canada, in conjunction with the Department of Public Works.

During the past year a Motor Transport Section was established in the Division to control the purchase, maintenance and general operational methods and costs of vehicles operated by the Department.

RESEARCH DIVISION

During the year, the Research division continued to be responsible for the collection and analysis of health and welfare material. The division acted in a research capacity for the Joint Committee of the Senate and House of Commons on Old Age Security, the Federal-Provincial Conference on Social Security held in Ottawa in December, 1950, the Defence Medical and Dental Services Advisory Board and other boards and committees as well as for officers of the department. It took an active part in the work of the interdepartmental committees on Rehabilitation of Disabled Persons, Old Age Security and Health Insurance, and in planning Canadian Sickness Survey.

Close working relations were continued with provincial health and welfare departments, the schools of public health and social work, the Canadian Welfare Council and the national voluntary agencies in both health and welfare fields. Liaison was maintained, and information exchanged, with leading agencies engaged in social welfare work. The responsibilities of the division were continued for the preparation of reports on different aspects of health and welfare services in Canada for the United Nations and its specialized agencies, notably the World Health and International Labour Organizations.

Valuable aid on various problems was received from the U.S. Social Security Administration and Public Health Service and on different occasions the division provided assistance to a number of U.S. organizations, including the American Medical Association and the Social Work Research Group of the American Conference on Social Work.

For the first three months of the year the division was employed as the research agency for the Joint Committee on Old Age Security. Bulletins on Old Age Security in Australia, New Zealand, Denmark, the United States, Great Britain, France and Switzerland were prepared for the Committee, together with data on existing Canadian old age pension legislation and a large number of memoranda on various aspects of social security in different countries. The division also prepared the chapters of the Committee's report which summarized the evidence presented.

At the request of the National Conference on Personnel in Social Work, preparations began during the year for a national survey to determine the demand for social workers in the welfare programs of public and voluntary agencies and institutions across Canada. The survey, which is intended to aid social agencies and schools of social work in planning training and staff development, covers all full time, paid employees in welfare positions as well as vacancies, new positions to be set up and preferences for trained social work staff. It is designed to show size, composition and area of work of existing welfare staffs and the distribution and use of qualified social workers.

A major part was taken by the division in the preparations for the National Conference on the Rehabilitation of Disabled Persons, held in Toronto on 1st to 3rd February 1950 and with the assistance of a number of other departments and authorities on different aspects of rehabili-

tation, a comprehensive manual, *The Rehabilitation of Disabled Persons*, was prepared for the use of the delegates prior to the conference.

The division assisted in the planning and conduct of the Canadian Sickness Survey and of the supplementary survey of permanent disability in Canada. A commencement was made on the preparation of the National Sickness Survey Report, a large portion of which will be written by the division, and detailed suggested outlines were prepared to aid the provinces in the preparation of the provincial reports.

Assistance continued to be rendered to the provinces in the conduct of the provincial health surveys. Statistical and consultative services were provided in the case of the industrial health survey of Newfoundland, carried out by the Industrial Health division, and microfilm records of physicians located in each province were made available for the assistance of the provincial health survey committees. Analysis of material collected by provincial survey committees was commenced in preparation for the writing of the National Health Survey Report.

Studies on the different aspects of prepaid medical and hospital care were pursued throughout the year. A number of comprehensive bulletins on programs in other countries were prepared, two of which, *Health Insurance in Denmark* and *Health Insurance in New Zealand* were published. The division continued to assist the Directorate of Health Insurance Studies in carrying out specific projects such as the development of national and per capita cost estimates for different services, the analysis of programs of government and voluntary health and hospital plans and the preparation of forecasts of future supply of and demand for health personnel. In addition, a study was commenced of national expenditure on medical and health services and the amount and distribution of expenditure by families of varying size and economic status, based on information obtained from a survey of family expenditure conducted by the Dominion Bureau of Statistics.

During the year, a number of reports for the United Nations were prepared by the division. Separate reports were prepared on the treatment of juvenile delinquents; on the objectives of youth guidance activities in Canada and the organization and administration of the major youth guidance services; and on services in Canada for blind and partially blind children. The division continued to furnish the United Nations with semi-annual bibliographies of social welfare literature, together with periodic reports on traffic in women and children and on legislative changes in the welfare field.

A number of additional comprehensive bulletins were produced during the year, amongst the most important of which were reports on the Hospital Insurance Programs in British Columbia and Saskatchewan, on Municipal Hospital and Doctor Plans in Canada and on Hospital and Medical Care for Public Assistance Recipients. The annual *Survey of Physicians in Canada*, was continued, and a volume of maps showing medical care and relative facilities in the Northwest Territories was prepared. A monthly article on different aspects of social welfare work outside Canada continued to be supplied to *Canada's Health and Welfare* and a number of other articles were prepared by the division for that publication. To supplement the series of bulletins begun the preceding year, a new series, *Research Division memos*, was begun, to provide information to departmental officials on research being carried on in health and welfare subjects.

TABLE 4

EXPENDITURES

DEPARTMENT OF NATIONAL HEALTH & WELFARE
1950-51

	\$	\$	\$
HEALTH BRANCH:			
General Administration		108,911.84	
General Health Services			
Food and Drugs	716,634.96		
Proprietary or Patent Medicines	26,330.02		
Opium and Narcotic Drugs	165,736.75		
Quarantine and Leprosy	262,297.74		
Laboratory of Hygiene	388,854.69		
Immigration Medical Inspection	686,112.27		
Child and Maternal Health	66,420.55		
Public Health Engineering	126,091.93		
Treatment of Sick Mariners	557,403.76		
Industrial Health	158,738.76		
Civil Service Health	213,555.22		
Nutrition	109,438.39		
Venereal Disease Control	34,360.28		
Health Insurance Studies	55,274.98		
Dental Health	39,068.12		
Hospital Designs	18,757.51		
Mental Health	73,449.41		
Blindness Control	26,504.78		
Epidemiology	26,084.98		
Civil Aviation Medicine	40,302.00		
Medical Services Indians and Eskimos	10,285,667.75		
Total		14,077,084.85	
Grants to Provinces			
Health Survey Grant	153,850.06		
Hospital Construction Grant	6,897,352.81		
General Public Health Grant....	2,907,730.15		
Tuberculosis Control Grant	3,166,166.01		
Mental Health Grant	2,644,826.65		
Venereal Disease Control Grant	484,165.41		
Crippled Children Grant	243,502.56		
Professional Training Grant	452,853.17		
Public Health Research Grant..	231,233.56		
Cancer Control Grant	1,693,105.80		
Total		18,874,786.18	
Grants to Non-Governmental Agencies			
Grants to Institutions			
Assisting Sailors	2,600.00		
Canadian National Committee for Mental Hygiene	10,000.00		
Health League of Canada	10,000.00		
Canadian Public Health Association	5,000.00		

(TABLE 4 (ctd.))

	\$	\$	\$
<i>Carried Forward</i>		33,060,782.87	
<i>Grants to Non-Governmental Agencies (Contd.)</i>			
Carried Forward	27,600.00		
Canadian National Institute for the Blind	45,000.00		
L'Association Canadienne Francaise des Aveugles	6,000.00		
L'Institut Nazareth de Montreal	4,050.00		
Montreal Association for the Blind	4,050.00		
Canadian Tuberculosis Association	20,250.00		
Victorian Order of Nurses	13,100.00		
St. John Ambulance Association	10,000.00		
Canadian Red Cross Society	10,000.00		
Canadian Paraplegic Association	15,000.00		
Total		<u>155,050.00</u>	
<i>Total, Health Branch</i>			33,215,832.87
WELFARE BRANCH			
<i>Administration</i>			
General	30,116.51		
Family Allowances	1,811,854.01		
Old Age Pensions and Pensions to the Blind	77,937.23		
National Physical Fitness	<u>74,868.00(a)</u>		
Total		1,994,775.75	
<i>Family Allowances Payments</i>		309,465,460.52	
<i>Grants to Provinces</i>			
Old Age Pensions	99,268,005.53		
Pensions to the Blind	3,901,109.01		
National Physical Fitness	<u>150,288.00(a)</u>		
Total		103,319,402.54	
<i>Grants to Non-Governmental Agencies</i>			
Canadian Welfare Council	12,600.00		
Schools of Social Work	<u>52,500.00</u>		
Total		<u>65,100.00</u>	
<i>Total, Welfare Branch</i>			414,844,738.81
ADMINISTRATION BRANCH			<u>792,335.37 (b)</u>
TOTAL, DEPARTMENT OF NATIONAL HEALTH & WELFARE			<u><u>448,852,907.05</u></u>

(a) These expenditures were made from the National Physical Fitness Trust Fund to which \$220,687.29 was transferred during the year.

(b) Includes gratuities to families of deceased employees.

TABLE 6
(Civil Service Health Division)

HEALTH UNIT STATISTICS — BY MONTHS
FISCAL YEAR 1950-51

	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	TOTAL
TOTAL VISITS.....	9,805	11,344	10,606	8,986	9,865	11,124	11,080	11,334	10,702	13,340	16,798	11,957	136,941
Male.....	4,226	5,039	4,626	4,115	4,471	5,065	5,044	4,941	4,737	6,097	8,160	5,636	62,157
Female.....	5,579	6,305	5,980	4,871	5,394	6,059	6,036	6,393	5,965	7,243	8,638	6,321	74,784
NATURE OF VISITS—													
First Visit.....	6,594	7,909	7,368	6,130	6,792	7,601	7,317	7,515	7,340	9,118	12,207	8,231	94,122
Repeat Visits.....	3,211	3,435	3,238	2,856	3,073	3,523	3,763	3,819	3,362	4,222	4,591	3,726	42,819
Illness.....	3,885	4,238	4,030	3,787	3,947	4,480	4,529	4,511	4,431	5,603	7,513	5,089	56,043
Accident.....	827	1,134	1,104	1,142	1,069	993	1,088	1,078	1,010	1,234	1,121	1,141	12,941
Consultation.....	1,262	1,552	1,423	1,170	1,277	1,387	1,558	1,584	1,182	1,685	1,393	1,412	16,885
Return to Work Visits.....	3,831	4,420	4,049	2,887	3,572	4,264	3,905	4,161	4,079	4,818	6,771	4,315	51,072
Days Lost due to Casual Absence.....	3,937	4,676	3,876	3,026	3,828	4,480	4,022	4,165	4,059	5,002	7,462	4,195	52,728
CLASSIFICATION—													
Respiratory.....	2,231	1,969	1,247	766	1,047	2,696	2,096	2,038	2,414	3,089	6,932	3,041	29,566
Digestive.....	951	1,303	1,360	1,264	1,555	1,139	989	1,115	1,083	1,147	808	878	13,592
Non-respiratory and non-digestive—													
Skin and Cellular.....	299	465	604	576	509	374	453	437	458	498	426	426	5,525
Menstrual Disorders.....	409	540	586	460	499	399	445	430	393	469	370	405	5,405
Emotional Disorders, Nervousness.....	124	144	146	110	131	96	135	158	127	152	100	114	1,537
Ill-defined and All Others.....	1,967	2,611	2,597	2,068	2,273	2,218	2,522	2,605	2,150	2,948	2,817	2,605	29,381
NON-INDUSTRIAL INJURIES.....	375	621	582	631	533	464	445	504	457	545	451	418	6,026
INDUSTRIAL INJURIES.....	232	250	239	250	243	213	229	219	252	261	298	341	3,027
CONTAGIOUS DISEASES.....	6	6	7	5	2	2	3	9	6	9	5	3	63
DISPOSAL—													
Sent Home.....	249	229	183	166	189	283	237	209	220	296	1,146	328	3,735
Return to Work.....	9,556	11,115	10,423	8,820	9,676	10,841	10,843	11,125	10,482	13,044	15,652	11,629	133,206
REFERRALS—													
Referred to H.C.....	142	220	172	168	143	215	220	191	194	296	215	197	2,373
Referred to Family Physician.....	369	485	423	378	445	459	462	487	425	537	595	489	5,554
NO. OF PERSONNEL UNDER- SUPERVISION.....	14,974	15,124	16,097	15,821	15,879	15,387	15,496	15,406	15,273	15,306	17,319	17,480	.....
NO. OF HEALTH UNITS IN OPERATION.....	14	14	15	15	15	15	15	15	15	15	16	16	16

TABLE 7
(Civil Service Health Division)
HEALTH CENTRE STATISTICS
FISCAL YEAR 1950-51

ITEMS	TOTAL
TOTAL VISITS.....	6,498
Male.....	4,132
Female.....	2,366
First Visits.....	3,368
Repeat Visits.....	3,130
PHYSICAL EXAMINATIONS	
Pre-Employment, Permanency, etc.....	1,557
Obligatory Examinations with immunization.....	208
Voluntary.....	723
Other.....	407
OTHER SERVICES	
Accident Industrial.....	65
Accident Non-Industrial.....	448
Immunization.....	927
Consultation interview, etc.....	2,163
DISPOSAL	
Return to Work.....	6,406
Sent Home.....	92
Referred to Family Physician.....	114
LABORATORY PROCEDURES	
Haemoglobin Tests.....	4,453
Red Blood Counts.....	548
White Blood Counts.....	332
Differential Counts.....	295
Urinalyses.....	127
Venepunctures for Serology.....	66
Tests for Sedimentation Rates.....	61
Glucose Tolerance Curves.....	6
Estimations of Fasting Blood Sugars.....	8
Colour Index.....	21
TOTAL.....	5,917
X-RAYS	
Hand.....	88
Wrist.....	32
Elbow.....	66
Shoulder.....	95
Foot.....	127
Ankle.....	187
Knee.....	25
Pelvis.....	3
Spine — Cervical	
— Dorsal.....	75
— Lumbar	
Skull.....	6
Sinuses — Frontal.....	27
Jaw.....	1
Chest.....	1,119
Ribs.....	34
Kidney.....	11
Stomach (6hr Plate G.I. Series).....	10
Gall-bladder.....	1
Chest. (Photo-roentgen unit).....	2,197
E.C.G.....	187
TOTAL.....	4,291

TABLE 8
(Civil Service Health Division)

ACTIVITIES OF CONSULTANT PSYCHOLOGIST
FISCAL YEAR 1950-51

ITEM	TOTAL
CONSULTATIONS (PERSONAL INTERVIEWS)	
No. Referred by Nursing Counsellors.....	192
No. referred by Psychiatrist (H.C.).....	42
No. referred by Clinicians (H.C.).....	9
No. referred Directly by Departmental Personnel Officers.....	12
No. referred by Departmental Personnel Officers through N/Cs.....	8
No. referred from Civil Service Commission.....	4
No. referred from D.V.A. Rehabilitation Officer.....	6
No. voluntarily requested by individual.....	13
No. repeat interviews — former cases.....	54
TOTAL.....	340
STAFF CONSULTATIONS	
Consultations with Personnel and Administrative Officers, Supervisors and Induction Interviews with Nursing Counsellors.....	59

TABLE 9
(Civil Service Health Division)

RETIREMENTS FROM SERVICE — ACCORDING TO DISABILITY
FISCAL YEAR 1950-51

Male — 176

Female — 32

Total — 210

CAUSE OF DISABILITY	AGE GROUPS					
	Under 40	40-44	45-49	50-54	55-59	Total
Infective and Parasitic.....	5	3	2	3	3	16
Neoplasms.....	1			4	9	14
Allergic, endocrine, metabolic, nutritional.....		1		2	5	8
Mental Psychoneurotic personality...	2	4	4	10	12	32
Nervous systems and sense organs ...	2		2	6	10	20
Circulatory.....		2	5	20	28	55
Respiratory.....			2	8	6	16
Digestive.....				3	4	7
Genito-urinary.....	1		1		4	6
Skin and cellular.....					2	2
Bones and organs of movement.....	2	3	2	8	12	27
Accidents and results of old..... injuries.....		1		1	5	7
TOTAL.....	13	14	18	65	100	210

TABLE 10
(Food and Drug Divisions)
DRUGS EXAMINED

From: April 1st, 1950 to March 31st, 1951

Laboratory at	Dom- estic	Imports	Mis- cel- lan- eous	Total	Passed by Inspectors at Customs	Grand Total	Adul- terated	Mis- branded	Other Infrac- tions
Halifax....	587	1,181	.....	1,768	2,769	4,537	173	972	.....
Montreal..	1,159	806	.....	1,965	12,335	14,300	61	688	.....
Ottawa....	706	79	.....	785	165	950	99	.....	.....
Toronto...	255	1,334	.....	1,589	8,162	9,751	14	730	48
Winnipeg..	271	1,029	.....	1,300	6,289	7,589	29	846	2
Vancouver.	783	1,056	.....	1,839	3,982	5,821	117	635	291
TOTALS ...	3,761	5,485	.....	9,246	33,702	42,948	493	3,871	341

TABLE 11
(Food and Drug Divisions)

EXAMINATION OF DOMESTIC FOODS

From: April 1st, 1950 to March 31st, 1951

	LABORATORIES						Adult- erated	Mis- branded	Other Infrac- tions	Totals
	Hali- fax	Mont- real	Ott- awa	Toron- to	Winni- peg	Van- couver				
Alimentary Pastes.....	13	10	.....	4	11	1	11	11	.....	39
Baking Powder—Leavening Agents or Chemicals.....	50	3	3	7	22	5	19	20	.....	90
Bakery Products—Cakes Pastry, etc.....	57	41	51	42	39	12	15	152	.....	242
Beverage and Beverage Concentrates.....	251	591	12	148	201	203	48	308	.....	1,406
Bread, Flour and Cereals.....	43	46	5	16	26	39	17	39	.....	175
Breakfast Foods.....	20	1	2	3	5	.....	13	1	.....	31
Confectionery.....	55	6	21	38	53	17	4	116	.....	190
Dairy Products.....	79	595	78	356	218	127	902	46	.....	1,453
Dessert Powders and Mixes ..	57	6	80	14	22	4	10	18	.....	183
Eggs and Egg Products.....	3	1	.....	.....	.....	.....	.....	2	.....	4
Fish and Fish Products.....	124	16	9	4	28	191	9	15	.....	372
Food Colours and Flavours...	63	6	28	16	28	39	29	84	.....	180
Food Oriental.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fruit—Fresh.....	6	.....	2	5	.....	.....	.....	3	.....	13
Fruit—Canned.....	94	88	20	10	79	19	19	10	.....	310
Fruit—Dried.....	26	2	6	1	4	.....	3	3	.....	39
Fruit—Glazed or Candied.....	.....	.....	.....	.....	9	8	2	6	.....	17
Gelatin.....	2	.....	35	.....	.....	1	1	2	.....	38
Honey or Honey Products.....	22	.....	9	.....	7	53	11	5	.....	91
Jams and Jellies.....	4	4	7	1	8	3	.....	6	.....	27
Juices and Syrups.....	120	11	33	1	126	47	4	50	.....	338
Lard and Shortening.....	.....	1	24	.....	.....	22	.....	1	.....	47
Liquors Distilled and Fermented.....	71	.....	73	.....	.....	9	6	1	5	153
Meat and Meat Products	250	730	108	265	539	493	623	52	.....	2,385
Nuts.....	7	.....	1	14	23	6	4	62	.....	51
Oils.....	17	2	.....	5	3	33	2	96	.....	60
Pickles.....	8	.....	.....	1	64	1	12	11	.....	74
Preservatives.....	.....	.....	.....	.....	1	20	1	2	.....	21
Salad Dressings—Sandwich Spreads and Other Condiments.....	11	2	3	16	30	10	3	45	.....	72
Soup and Soup Mixes.....	7	1	52	9	21	1	5	12	.....	91
Spices.....	18	17	18	10	72	48	21	27	.....	183
Sugar and Substitutes.....	3	4	2	.....	3	1	4	2	.....	13
Sweeteners—Artificial.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1
Syrups and Molasses.....	12	1	6	8	10	30	24	8	.....	67
Vegetables—Canned.....	100	26	30	21	273	20	14	53	.....	470
Vegetables—Dried.....	8	6	5	1	1	1	8	2	.....	22
Vegetables—Fresh.....	1	.....	3	4	1	2	.....	5	.....	11
Vinegar.....	5	1	1	2	2	45	7	16	.....	56
Water.....	39	8	4	.....	5	.....	.....	6	.....	56
Miscellaneous.....	48	.....	15	12	28	3	8	29	.....	106
GRAND TOTALS.....	1,694	2,226	746	1,034	1,962	1,515	1,859*	1,327*	5*	9,177

* These totals are not included in the righthand column.

TABLE 12
(Food and Drug Divisions)
EXAMINATION OF IMPORTED FOODS
FROM: APRIL 1ST, 1950 TO MARCH 31ST, 1951

	LABORATORIES						Adult- erated	Mis- branded	Other Infrac- tions	Total
	Hali- fax	Mont- real	Ott- awa	Toron- to	Winni- peg	Van- couver				
Alimentary Pastes.....	4				1	1		2		6
Baking Powder-Leavening Agents or Chemicals.....	9			2		4		5		15
Bakery Products — Cakes, Pastry, etc.	14	9		30	12	24		35		89
Beverage and Beverage Concentrates.....	36	31		36	15	15	7	76		133
Bread, Flour and Cereals.....	29	25		2	2	15	2	20		73
Breakfast Foods.....	1	6		1		2		7		10
Confectionery.....	109	52	4	21	92	287	39	86		565
Dairy Products.....	61	105		24	5	50	15	318		245
Dessert Powders and Mixes ..	10			2		11		14		23
Eggs and Egg Products.....										
Fish and Fish Products.....	13	2	2	26	569	145	76	85		757
Food Colours and Flavours...	58	2		4	11	31	4	31		106
Food Oriental.....	57				233		1	210		290
Fruit—Fresh.....		60	2	2	215	2	2	5		281
Fruit—Canned.....	5			3		71	1	3		79
Fruit—Dried.....	149	471	4	86	1,057	579	113	73		2,346
Fruit—Glazed or Candied.....					4	6		5		10
Gelatin.....			20			1	1			21
Honey or Honey Products....	5			1	1	3		6		10
James and Jellies.....	1	2		4		14	2	6		21
Juices and Syrups.....	74	11	1	1	6	40	4	28		133
Lard and Shortening.....						2		1		2
Liquors Distilled and Fermented.....	3				1	1		2		5
Meat and Meat Products	18	1		6	1	125	42	13		151
Nuts.....	279	680	9	283	776	433	258	119	3	2,460
Oils.....	8	63		6	2	3	5	17		82
Pickles.....	4					7	4	4		11
Preservatives.....				4	2			5		6
Salad Dressings—Sandwich Spreads and other condiments.....	12	5		13	3	11	3	12		44
Soup and Soup Mixes.....	6	2		1		1		8		10
Spices.....	32	228	8	21	75	67	11	37		431
Sugar and Substitutes.....	2	1						2		3
Sweeteners—Artificial.....										
Syrups and Molasses.....	383	794		1	2	3	4	9		1,183
Vegetables—Canned.....	34	1		1		12		5		48
Vegetables—Dried.....	10	2		2	11	7		10		32
Vegetables—Fresh.....	1			4			4			5
Vinegar.....	1	18		5		3	3	10		27
Water.....	2	1								3
Miscellaneous.....	41		1	10	41	3	2	46		96
GRAND TOTALS.....	1,471	2,572	51	602	3,137	1,979	*603	*1,315	*3	9,812

* These totals are not included in the righthand total column.

TABLE 13
(Food and Drug Divisions)

RADIO COMMERCIALS—LABELS—ADVERTISEMENTS REVIEWED
FISCAL YEAR 1950-51

	RADIO COMMERCIALS	LABELS—ADVERTISEMENTS	TOTALS
Food and Drug Act	17,293	4,459	21,752
Proprietary or Patent Med. Act	10,225	1,930	12,155
GRAND TOTALS	27,518	6,389	33,907

TABLE 14
(Narcotic Control Division)
CONVICTIONS UNDER THE OPIUM AND NARCOTIC DRUG ACT
FOR THE JUDICIAL YEAR ENDED SEPTEMBER 30TH 1950

PROVINCE	NATURE OF OFFENCE						DRUGS INVOLVED							
	Pos-session of Drugs	Selling Offering Giving Away and Delivery	Cultiva-ting Opium Poppies	Obtain-ing Drugs from more than one Physician	Profes-sional Cases Under Sec. 6 of the Act	Totals	Opium	Mor-phine	He-roin	Mari-huana	Co-caine	Meth-adone	Dem-erol	Totals
Newfoundland.....														
Prince Edward Island														
Nova Scotia.....	3					3		2		1				3
New Brunswick . . .		1				1				1				1
Quebec.....	26	5			2	33		4	29					33
Ontario.....	82	2			1	85		11	73		1			85
Manitoba.....	17					17	1		16					17
Saskatchewan.....	2					2		1	1					2
Alberta.....	40	4		1		45	4	2	36		1	1	1	45
British Columbia . . .	171	1	1			173	7	2	164					173
Yukon Territory....	1					1			1					1
TOTALS.....	342	13	1	1	3	360	12	22	320	2	2	1	1	360

TABLE 15
(Narcotic Control Division)
IMPORTS OF MAIN NARCOTICS
FOR PERIOD 1941 — 1950 INCLUSIVE

Unit of Weight — Ounce, Pure Drug

Year	Raw Opium	Medicinal Opium & Preparations	Morphine	Heroin	Cocaine	Ethyl- Morphine	Dilaudide	Papa- verine	Codeine	Demerol	Amidone
1941.....	5,600	15,032	3,354	880	1,681	764	9	139	16,120	.....	.....
1942.....	.....	2,088	2,865	682	1,831	147	14	122	15,291	.....	.....
1943.....	1,344	9,390	4,360	964	2,338	844	14	46	9,777	.....	.....
1944.....	1,056	416	5,229	468	1,233	2,131	10	354	26,149	1,211	.....
1945.....	4,000	3,842	4,791	762	361	1,195	19	571	23,122	2,085	.....
1946.....	4,000	4,614	1,181	1,020	1,797	664	23	805	35,885	5,539	.....
1947.....	3,360	6,458	1,046	906	2,169	745	18	961	36,915	9,018	.....
1948.....	3,200	3,040	3,013	1,019	993	919	26	2,809	34,058	5,175	892
1949.....	1,720	3,202	3,168	906	666	1,433	11	943	37,751	4,106	1,068
1950.....	1,609	4,000	2,337	748	1,344	1,207	21	1,292	93,269	5,480	92

TABLE 16
(Narcotic Control Division)
ESTIMATED CONSUMPTION OF THE MAIN NARCOTICS
FOR THE PERIOD 1921-1950 INCLUSIVE
Unit of Weight — Ounce, Pure Drug

Year	Raw Opium	Medicinal Opium & Prepara- tions	Morphine	Heroin	Cocaine	Ethyl- morphine	Dilaudide	Papaverine	Codeine	Demerol
1941.....	2,363	10,123	3,527	1,023	1,376	528	14	56	19,964	.....
1942.....	3,562	8,219	3,704	917	1,517	615	14	138	21,983	.....
1943.....	3,704	5,645	4,445	811	1,623	739	12	171	21,630	.....
1944.....	3,810	7,090	3,633	740	1,480	1,458	14	280	22,241	1,042
1945.....	3,175	6,314	3,351	670	1,305	691	12	381	22,809	1,102
1946.....	3,422	4,797	3,492	1,058	1,552	1,110	22	455	36,191	2,045
1947.....	3,932	4,734	3,090	881	1,390	1,107	15	715	36,484	5,894
1948.....	2,090	6,026	3,074	995	1,407	1,032	22	1,416	39,672	5,642
1949.....	2,010	3,606	2,718	898	1,197	949	16	1,359	44,443	6,852
1950.....	2,330	5,375	2,613	1,000	1,408	1,103	16	1,632	45,582	7,270

[TABLE 17
(Immigration Medical Service)
SUMMARY OF ACTIVITIES
FISCAL YEAR 1950-51

CANADA:

Immigrants medically inspected on arrival at ocean and air ports.....	77,348
Non-immigrants medically inspected on arrival at ocean and air ports.....	17,579
Certified as "prohibited" under Immigration Act, Sec. 3, (a) and (b).....	25
Certified as physically defective, Sec. 3 (c).....	169
Refused permanent admission for medical reasons, at ocean and air ports.....	7
Total number rejected at all ports.....	340

OVERSEAS — (United Kingdom, Continent and Orient):

Prospective emigrants medically examined.....	136,755
Certified as "prohibited" under Immigration Act, Sec. 3, (a), (b) and (k).....	1,391
Certified as physically defective, Sec. 3 (c).....	9,076
Refused admission.....	1,701
Re-examinations.....	17,560

United Kingdom:

Prospective emigrants medically examined.....	42,445
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Continent of Europe:

Prospective emigrants medically examined.....	92,076
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Orient:

Prospective emigrants medically examined.....	2,234
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EXAMINATION OVERSEAS:

	Examinations	Re-exami- nations
By Canadian Medical Officers in British Isles.....	34,372	1,703
By Roster Doctors in British Isles.....	8,073	835
By Canadian Medical Officers on the Continent (a).....	47,998	8,579
By Roster Doctors on the Continent.....	13,271	461
By Canadian Medical Officers in Germany.....	25,526	4,949
By Canadian Medical Officers in Austria.....	5,281	1,027
By Roster Doctors in the Orient.....	2,234	6
TOTAL, (Fiscal year 1950-51).....	136,755	17,560
TOTAL, (Fiscal year 1949-50).....	81,998	17,331

(a) Except Austria and Germany

EXAMINATIONS OVERSEAS:

By Canadian Medical Officers in London.....	18,042
" " " in Glasgow.....	7,790
" " " in Liverpool.....	7,896
" " " in Belfast.....	644
" " " in Paris.....	6,931
" " " in Brussels.....	5,426
" " " in The Hague.....	15,523
" " " in Rome.....	19,914
" " " in Stockholm.....	204
" " " in Austria.....	5,281
" " " in Germany.....	25,526
By Roster Doctors, in British Isles.....	8,073
" " on the Continent.....	13,271
" " in Pakistan.....	9
" " in India.....	75
" " in China.....	2,150
TOTAL.....	136,755

(Table 17 Ctd.)
DETAILS OF EXAMINATIONS
FISCAL YEAR 1950-51

	Immigrants	Non-Immigrants
Gander, Newfoundland.....	1,854	2,476
St. John's, Newfoundland.....	610	317
Harmon Field, Newfoundland.....	30	48
Halifax, N.S.....	36,449	1,278
Dartmouth, N.S.....	.....	69
North Sydney, N.S.....	3	92
Sydney, N.S.....	193	400
Saint John, N.B.....	4,938	434
Moncton, N.B.....	79	70
Quebec, P.Q.....	20,420	6,749
Port Alfred, P.Q.....	62	63
Dorval, P.Q.....	2,459	3,134
Montreal, P.Q.....	654	417
Malton, Ont.....	220	611
Vancouver, B.C.....	461	1,239
Victoria, B.C.....	42	142
Other Ports.....	37	40
Ports (not stated).....	122	.....
U.S.A. Ports.....	8,715	.....
TOTALS.....	77,348	17,579

Rejections — 340

CERTIFICATIONS AND DISPOSITIONS OF CASES AT CANADIAN PORTS
FISCAL YEAR 1950-51

SUBSECTION	Admitted	Deported	Pending	Totals
Section 3, s.s. (a), Mental diseases and defects.....	2*	3	4	9
Section 3, s.s. (b), Loathsome diseases, including tuberculosis.....	2*	1	13	16
Section 3, s.s. (c), Physical diseases and defects.....	79	3	87	169
TOTALS.....	83	7	104	194

*Temporary entry.

TABLE 18
(Immigration Medical Service)

CERTIFICATIONS AND DISPOSITIONS OF CASES OVERSEAS

Migrants medically examined prior to embarkation and certified under
Section 3 of the Immigration Act

FISCAL YEAR 1950-51

	BRITISH ISLES		CONTINENT OF EUROPE				TOTAL
	Examined by Can. M.O's.	Examined by Roster Drs.	Examined by Can. M.O's.	Examined by Roster Drs.	Examined CMO Germany	Examined CMO Austria	
Certified under:							
SS (a) Mental Diseases and Defects	44	19	105	12	35	6	221
SS (b) Loathsome and Contagious Diseases.....	446	84	479	173	847	77	2,106
SS (c) Physical Defects.....	3,417	900	3,784	1,075	4,667	1,072	14,915
SS (k) Constitutional Psychopathic Inferiority.....	23	1	5	0	2	3	34
TOTAL.....	3,930	1,004	4,373	1,260	5,551	1,158	17,276

TABLE 19
(Quarantine Service)
SHIPS BOARDED BY QUARANTINE OFFICERS, 1950-51

The following table indicates the number of ships boarded during the fiscal year 1950-51, also total personnel on board, divided into their respective groups

PERSONNEL INSPECTED								
Station	Vessels Inspected	PASSENGERS				Crews	Cattlemen, Stowaways, Distressed Seamen, Etc.	Port Totals
		First Class	Cabin and Second Class	Tourist Third	Third Class and Steerage			
Halifax, N.S.....	506	6,623	4,460	49,488	22,926	49,317	21	132,835
Saint John, N.B.....	275	1,219	371	3,864	2,331	15,417	27	23,229
Quebec, P.Q.....	1,243	15,199	2,703	31,616	5,460	71,760	73	126,811
William Head, B.C....	481	1,322	1,127	.....	534	20,974	22	23,979
TOTALS.....	2,505	24,363	8,661	84,968	31,251	157,468	143	306,854

TABLE 20
(Quarantine Service)

VESSELS INSPECTED FOR DERATIZATION, 1950-51

Port	Vessels inspected, fumigated and deratization certificates issued	Vessels inspected and exemption certificates issued	Vessels inspected and time extended or certificates endorsed	Total vessels inspected for vermin	Rodents Recovered	
					Rats	Mice
Halifax, N.S.....	6	65	3	74	2	.....
Sydney, N.S.....	.....	9	.....	9	.....	.....
Saint John, N.B.....	2	21	1	24	.....	.....
Port Alfred, P.Q.....	.....	30	.....	30	.....	.....
Quebec, P.Q.....	3	4	.....	7	.....	.....
Trois-Rivieres, P.Q.....	1	7	.....	8	38	.....
Sorel, P.Q.....	2	2	.....	4	.....	.....
Montreal, P.Q.....	13	114	68	195	37	116
Vancouver, B.C.....	59	90	149	298	174	10
Victoria, including Esquimalt, B.C.....	1	15	32	48	.....	.....
Port Alberni, B.C.....	1	4	15	20	12	.....
TOTALS.....	88	361	268	717	263	126

TABLE 21
(Sick Mariners Service)
TOTAL NUMBER OF VESSELS — DUES COLLECTED AND EXPENDITURES
CALENDAR YEAR 1950

VESSELS	Number Vessels Paying Dues	Total Dues Collected	Total Number of Crew	Total Expenditure	Average Expenditure for each Member of Crew
Foreign	2,000	\$223,144.43	75,102	\$240,193.02	\$ 3.20
Vessels Trading Continually between Canadian Ports	4,484	12,912.02	18,086	202,617.17	11.20
TOTAL	6,484	236,056.45	93,188	442,810.19	4.75

TABLE 22
(Family Allowances Division)

NUMBER OF EMPLOYEES as at 31 MARCH, 1950

PROVINCE	Authorized Establishment	Permanent	Temporary	Total filled	Vacancies	Casuals	Remarks
Newfoundland.....	30	6	24	29	1	6	
Prince Edward Island.....	9	2	7	7	2		
Nova Scotia.....	46	13	33	45	1		
New Brunswick.....	45	14	31	42	3		
Quebec.....	217	50	167	210	7	19	19 casuals released 31 March/50
Ontario.....	199	79	120	187	12		
Manitoba.....	49	24	25	48	1		
Saskatchewan.....	51	14	37	48	3		
Alberta.....	49	14	35	49			
British Columbia.....	47	18	29	46	1		
Ottawa & Yukon & N.W.T.	15	10	5	14	1		
TOTAL.....	757	244	513	725	32	25	

NUMBER OF EMPLOYEES as at 31 MARCH, 1951

PROVINCE	Authorized Establishment	Permanent	Temporary	Total filled	Vacancies	Casuals	Remarks
Newfoundland.....	30	12	18	30		6	6 casuals released 31 March/51
Prince Edward Island.....	8	6	2	8			
Nova Scotia.....	47	23	24	44			
New Brunswick.....	43	30	13	40	3		
Quebec.....	218	115	103	203	15		
Ontario.....	188	106	82	178	10		
Manitoba.....	46	25	21	44	2		
Saskatchewan.....	48	26	22	43	5		
Alberta.....	51	27	24	45	6		
British Columbia.....	47	26	21	45	2		
Ottawa & Yukon & N.W.T.	14	10	4	14			
TOTAL.....	740	406	334	694	46	6	

TABLE 23
(Family Allowances Division)
FAMILY ALLOWANCES PAYMENTS
FISCAL YEAR 1950-51

PROVINCE	April	May	June	July	August	September	TOTAL
Newfoundland.....	833,866	840,769	843,000	840,257	842,588	848,789	\$10,228,923
Prince Edward Island.....	203,630	204,372	204,045	205,125	206,013	206,356	2,468,192
Nova Scotia.....	1,293,028	1,296,429	1,297,078	1,301,249	1,303,798	1,307,223	15,671,843
New Brunswick.....	1,134,336	1,137,061	1,138,920	1,141,448	1,144,637	1,144,054	13,717,066
Quebec.....	8,166,550	8,184,606	8,224,887	8,250,498	8,280,762	8,302,915	99,647,287
Ontario.....	7,275,486	7,297,592	7,320,868	7,351,737	7,391,701	7,416,751	89,117,562
Manitoba.....	1,334,381	1,338,132	1,342,460	1,353,010	1,357,773	1,354,466	16,250,774
Saskatchewan.....	1,587,076	1,592,075	1,594,306	1,606,516	1,611,264	1,613,532	19,244,467
Alberta.....	1,691,449	1,698,823	1,708,163	1,720,628	1,740,548	1,715,529	20,785,064
British Columbia.....	1,793,373	1,798,704	1,804,758	1,819,517	1,830,162	1,834,714	21,985,012
Yukon and N.W.T.....	50,719	51,567	54,507	51,988	55,275	54,391	637,665
NATIONAL.....	25,363,894	25,440,130	25,532,992	25,641,973	25,764,521	25,798,720	309,753,855

	October	November	December	January	February	March	TOTAL
Newfoundland.....	856,535	860,161	862,901	863,508	865,101	871,448	\$10,228,923
Prince Edward Island.....	206,381	205,756	206,661	205,943	206,740	207,170	2,468,192
Nova Scotia.....	1,304,735	1,309,549	1,311,854	1,313,228	1,314,609	1,319,063	15,671,843
New Brunswick.....	1,145,126	1,143,402	1,146,983	1,147,032	1,147,480	1,146,587	13,717,066
Quebec.....	8,309,343	8,332,913	8,354,630	8,391,584	8,411,509	8,437,090	99,647,287
Ontario.....	7,435,209	7,468,315	7,497,184	7,529,551	7,555,553	7,577,615	89,117,562
Manitoba.....	1,352,600	1,357,549	1,358,049	1,363,250	1,368,529	1,370,575	16,250,774
Saskatchewan.....	1,605,769	1,608,381	1,606,222	1,605,681	1,605,632	1,608,013	19,244,467
Alberta.....	1,755,763	1,747,743	1,743,505	1,751,803	1,756,364	1,754,746	20,785,064
British Columbia.....	1,828,721	1,839,252	1,848,344	1,856,568	1,863,757	1,867,142	21,985,012
Yukon and N.W.T.....	53,123	51,735	52,910	51,880	53,465	56,105	637,665
NATIONAL.....	25,853,305	25,924,756	25,989,243	26,080,028	26,148,739	26,215,554	309,753,855

TABLE 24 (Family Allowances Division)
FAMILIES IN PAY—FISCAL YEAR 1950-51

PROVINCE	April	May	June	July	August	September
Newfoundland.....	50,699	50,808	50,905	50,910	50,923	51,048
Prince Edward Island.....	13,201	13,234	13,256	13,312	13,348	13,346
Nova Scotia.....	91,023	91,168	91,246	91,364	91,491	91,595
New Brunswick.....	72,612	72,668	72,703	72,821	72,922	72,890
Quebec.....	509,255	510,457	512,251	514,274	516,474	517,747
Ontario.....	605,776	607,515	609,279	611,396	613,757	615,242
Manitoba.....	105,981	106,284	106,564	106,846	107,113	107,086
Saskatchewan.....	117,141	117,438	117,811	118,222	118,446	118,689
Alberta.....	131,121	131,769	132,480	133,222	133,656	132,893
British Columbia.....	156,664	156,887	157,193	157,717	158,273	158,567
Yukon and N.W.T.....	3,866	3,890	3,910	3,929	3,977	3,978
NATIONAL.....	1,857,339	1,862,118	1,867,598	1,874,013	1,880,380	1,883,081

PROVINCE	October	November	December	January	February	March
Newfoundland.....	51,173	51,180	51,292	51,349	51,466	51,663
Prince Edward Island.....	13,343	13,339	13,358	13,311	13,317	13,317
Nova Scotia.....	91,499	91,667	91,847	91,879	91,981	92,095
New Brunswick.....	72,860	72,822	72,866	72,793	72,722	72,692
Quebec.....	519,192	520,380	521,403	523,152	524,503	525,358
Ontario.....	616,955	619,082	621,301	623,550	625,499	627,511
Manitoba.....	107,175	107,351	107,644	107,757	108,159	108,288
Saskatchewan.....	118,544	118,554	118,333	118,265	118,141	118,276
Alberta.....	134,365	134,834	135,235	135,351	135,781	135,864
British Columbia.....	158,520	159,116	159,765	160,178	160,669	161,088
Yukon and N.W.T.....	3,974	3,968	3,970	3,987	4,008	4,040
NATIONAL.....	1,887,600	1,892,293	1,897,014	1,901,572	1,906,246	1,910,192

No. of families as at 31st March, 1951..... 1,910,192
No. of families as at 31st March, 1950..... 1,852,269
Increase..... 57,923

TABLE 25
(Family Allowances Division)

CHILDREN IN PAY — FISCAL YEAR 1950-51

PROVINCE	April	May	June	July	August	September
Newfoundland.....	139,768	140,345	141,000	140,923	141,438	142,066
Prince Edward Island.....	33,714	33,854	33,915	33,826	34,231	34,274
Nova Scotia.....	214,357	214,806	215,090	215,621	215,917	216,413
New Brunswick.....	189,162	189,617	189,925	190,384	190,939	190,901
Quebec.....	1,356,225	1,362,700	1,366,827	1,371,899	1,375,852	1,381,217
Ontario.....	1,209,825	1,214,358	1,218,872	1,225,423	1,230,727	1,235,000
Manitoba.....	221,812	222,597	223,350	224,740	225,580	225,041
Saskatchewan.....	262,158	262,869	262,695	264,670	264,999	265,367
Alberta.....	281,927	282,065	283,468	285,764	287,686	284,567
British Columbia.....	300,764	301,571	302,580	304,929	306,341	307,148
Yukon and N.W.T.....	8,308	8,337	8,441	8,521	8,761	8,713
NATIONAL.....	4,218,020	4,233,119	4,246,163	4,266,700	4,282,471	4,290,707

PROVINCE	October	November	December	January	February	March
Newfoundland.....	142,800	143,195	143,856	144,128	144,569	145,230
Prince Edward Island.....	34,257	34,229	34,195	34,094	34,235	34,308
Nova Scotia.....	216,222	216,836	217,380	217,768	218,183	218,496
New Brunswick.....	191,073	191,013	191,366	191,486	191,591	191,608
Quebec.....	1,383,111	1,386,723	1,390,737	1,395,784	1,400,668	1,405,161
Ontario.....	1,238,900	1,244,023	1,249,184	1,255,024	1,260,917	1,265,313
Manitoba.....	225,237	225,778	226,217	226,685	227,707	228,245
Saskatchewan.....	264,380	264,648	264,410	264,548	264,372	264,582
Alberta.....	287,969	289,098	289,742	290,623	291,822	292,104
British Columbia.....	305,253	307,521	309,527	311,000	312,447	313,525
Yukon and N.W.T.....	8,476	8,662	8,645	8,681	8,758	8,819
NATIONAL.....	4,297,678	4,311,726	4,325,259	4,339,821	4,355,269	4,367,391

No. of children as at 31st March, 1951..... 4,367,391
No. of children as at 31st March, 1950..... 4,202,263
Increase..... 165,128

TABLE 26
(Family Allowances Division)
CLASSIFICATION OF FAMILIES BY NUMBER OF CHILDREN

Number of Children in Family	NUMBER OF FAMILIES AS AT					Comparison of 1950 over 1951	
	March 31, 1946	March 31, 1947	March 31, 1948	March 31, 1949	March 31, 1950		
1 child	554,026	645,684	685,251	699,905	730,586	733,100	+ 2,514
2 children	385,464	444,415	472,448	495,176	539,831	567,206	+ 27,375
3 children	207,241	231,494	238,512	254,682	278,161	292,753	+ 14,592
4 children	114,992	120,872	124,277	127,679	140,051	148,109	+ 8,058
5 children	63,676	67,024	67,602	69,298	74,380	77,325	+ 2,945
6 children	37,352	38,012	37,126	38,277	41,353	42,676	+ 1,323
7 children	21,486	21,967	22,088	21,783	23,721	24,073	+ 352
8 children	12,164	12,471	12,365	12,141	13,027	13,428	+ 401
9 children	6,210	6,349	6,132	6,130	6,676	6,823	+ 147
10 children	2,871	2,907	2,766	2,653	2,895	3,065	+ 170
11 children	1,132	1,152	991	1,038	1,149	1,211	+ 62
12 children	320	307	304	301	350	330	- 20
13 children	106	78	67	76	74	77	+ 3
14 children	13	17	14	10	13	11	- 2
15 children	1	2	1	1	2	5	+ 3

TABLE 27
(Family Allowances Division)

COMPARATIVE STATEMENT OF FAMILY ALLOWANCES PAYMENTS
BETWEEN MONTH OF MARCH, 1950 AND MONTH OF MARCH, 1951

PROVINCE	MONTH OF MARCH, 1950					MONTH OF MARCH, 1951				
	Families in Pay		Children in Pay		Amount Paid	Families in Pay		Children in Pay		Amount Paid
	Number	Average Allow. per Family	Number	Average Allow. per Child		Number	Average Allow. per Family	Number	Average Allow. per Child	
Newfoundland	50,694	\$16.48	139,571	\$5.99	\$ 835,534	51,663	\$16.87	145,230	\$6.00	\$ 871,448
Prince Edward Island .	13,165	15.41	33,588	6.04	202,853	13,317	15.56	34,308	6.04	207,170
Nova Scotia	91,012	14.18	213,981	6.03	1,291,026	92,095	14.32	218,496	6.04	1,319,063
New Brunswick	72,410	15.61	188,593	5.99	1,130,338	72,692	15.77	191,608	5.98	1,146,587
Quebec	507,727	16.00	1,350,588	6.01	8,124,539	525,358	16.06	1,405,161	6.00	8,437,090
Ontario	603,847	12.01	1,204,558	6.02	7,252,071	627,511	12.07	1,265,313	5.99	7,577,615
Manitoba	105,611	12.58	220,862	6.02	1,328,884	108,288	12.66	228,245	6.00	1,370,575
Saskatchewan	116,917	13.56	261,623	6.06	1,585,299	118,276	13.59	264,582	6.08	1,608,013
Alberta	130,686	12.89	280,780	6.00	1,685,215	135,864	12.91	292,104	6.01	1,754,746
British Columbia	156,367	11.44	299,838	5.96	1,788,233	161,088	11.59	313,525	5.95	1,867,142
Yukon and N.W.T.	3,833	13.51	8,281	6.25	51,804	4,040	13.89	8,819	6.36	56,105
NATIONAL	1,852,269	13.64	4,202,263	6.01	25,275,796	1,910,192	13.72	4,367,391	6.00	26,215,554

TABLE 28
(Family Allowances Division)
INCREASE SHOWN IN COMPARING FAMILY ALLOWANCES PAYMENTS
MARCH 1950 AND MARCH 1951

PROVINCE	Increase in Number of Families in Pay		Increase in Number of Children in Pay		Increase in Amount Paid	
	Number	Percent	Number	Percent	Amount	Percent
Newfoundland.....	969	1.91	5,659	4.05	\$ 35,914	4.30
Prince Edward Island.....	152	1.15	720	2.14	4,317	2.13
Nova Scotia.....	1,083	1.19	4,515	2.11	28,037	2.17
New Brunswick.....	282	0.39	3,015	1.60	16,249	1.44
Quebec.....	17,631	3.47	54,573	4.04	312,551	3.85
Ontario.....	23,664	3.92	60,755	5.04	325,544	4.49
Manitoba.....	2,677	2.53	7,383	3.34	41,691	3.14
Saskatchewan.....	1,359	1.16	2,959	1.13	22,714	1.43
Alberta.....	5,178	3.96	11,324	4.03	69,531	4.12
British Columbia.....	4,721	3.02	13,687	4.56	78,909	4.41
Yukon and N.W.T.....	207	5.40	538	6.50	4,301	8.30
NATIONAL.....	57,923	3.13	165,128	3.93	\$939,758	3.72

TABLE 29
(Family Allowances Division)

AVERAGE ALLOWANCE PER FAMILY AND PER CHILD
MARCH 1951

PROVINCE	Average per Family	Average per Child
Newfoundland.....	\$16.87	\$6.00
Prince Edward Island.....	15.56	6.04
Nova Scotia.....	14.32	6.04
New Brunswick.....	15.77	5.98
Quebec.....	16.06	6.00
Ontario.....	12.07	5.99
Manitoba.....	12.66	6.00
Saskatchewan.....	13.59	6.08
Alberta.....	12.91	6.01
British Columbia.....	11.59	5.95
Yukon & N.W.T.....	13.89	6.36
NATIONAL.....	13.72	6.00

TABLE 30

(Family Allowances Division)

OVERPAYMENTS OF FAMILY ALLOWANCES REMAINING UNPAID

MARCH, 1951

(The overpayments may have occurred at any time between July 1, 1945 and March 31, 1950)

PROVINCE	Overpayments Recoverable by Deductions		Overpayments Recoverable by Collections		Overpayments Considered Uncollectible		Total Overpayments Outstanding	
	Number of Accounts	Amount	Number of Accounts	Amount	Number of Accounts	Amount	Number of Accounts	Amount
Newfoundland.....	37	\$1,430.00	28	\$ 577.00	4	\$ 74.00	69	\$ 2,081.00
Prince Edward Island.....	24	620.00	3	35.00	2	47.00	29	702.00
Nova Scotia.....	73	4,116.00	132	3,262.00	33	1,172.00	238	8,550.00
New Brunswick.....	113	3,443.00	190	5,650.65	90	4,788.50	393	13,882.15
Quebec.....	1,082	84,906.64	2,488	180,710.94	509	43,006.37	4,079	308,623.95
Ontario.....	294	20,371.61	772	25,412.14	369	15,746.90	1,435	61,530.65
Manitoba.....	58	1,521.00	91	2,304.50	36	2,021.00	185	5,846.50
Saskatchewan.....	69	3,424.00	88	3,286.30	38	2,099.000	195	8,809.30
Alberta.....	119	4,410.00	122	3,451.01	68	4,417.90	309	12,278.91
British Columbia.....	147	4,631.00	128	5,227.50	76	3,163.75	351	13,022.25
Northwest Territories & Yukon.....	18	496.00	37	1,888.00	12	690.52	67	3,074.52
NATIONAL.....	2,034	\$129,369.25	4,079	\$231,805.04	1,237	\$77,226.94	7,350	\$438,401.23

TABLE 31
(Family Allowances Division)

OVERPAYMENTS OF FAMILY ALLOWANCES REMAINING UNPAID
MARCH 31, 1951, COMPARED TO MARCH 31, 1950

(These overpayments may have occurred at any time between July 1, 1945 and March 31, 1951)

PROVINCE	March 1950 Total Overpayments Outstanding		March 1951 Total Overpayments Outstanding		Increase or Decrease in total Overpayments since 31st March, 1950
	Number of accounts	Amount	Number of accounts	Amount	
		\$		\$	\$
Newfoundland	54	860.00	69	2,081.00	+ 1,221.00
Prince Edward Island . .	33	858.00	29	702.00	- 156.00
Nova Scotia	261	7,911.72	238	8,550.00	+ 638.28
New Brunswick	313	13,413.15	393	13,882.15	+ 469.00
Quebec	4,480	333,421.98	4,079	308,623.95	- 24,798.03
Ontario	1,243	51,976.13	1,435	61,530.65	+ 9,554.52
Manitoba	206	6,910.50	185	5,846.50	- 1,064.00
Saskatchewan	159	6,855.50	195	8,809.30	+ 1,953.80
Alberta	355	12,557.90	309	12,278.91	- 278.99
British Columbia	342	11,941.75	351	13,022.25	+ 1,080.50
Yukon & N.W.T.	104	4,468.15	67	3,074.52	- 1,393.63
NATIONAL	7,550	451,174.78	7,350	438,401.23	- 12,772.95

TABLE 32
(Family Allowances Division)

OVERPAYMENTS ESTABLISHED FOR FIRST TIME IN 1950-51

NOTE: Most of these overpayments were recovered in the year in which they were incurred.

CATEGORY	No. of Accounts	P.C.	Amount		P.C.	Average overpayment per account
	No.	%	\$	*	%	\$
Working for Wages	4,325	36.2	93,655	(1)	20.83	21.65
Non-School Attendance . .	2,817	23.6	77,957	(3)	17.34	27.67
Non-Maintenance	1,708	14.3	78,375	(2)	17.43	45.89
Child Deceased	1,183	9.9	62,841	(4)	13.98	53.12
Birth Date Errors	756	6.3	51,273	(5)	11.40	67.82
Internal Errors	433	3.6	28,976	(6)	6.44	66.91
Non-Resident	333	2.7	12,454	(9)	2.77	37.39
Duplicate Accounts	161	1.3	28,488	(7)	6.34	17.69
Immigration Requirements	10	0.8	1,506	(10)	0.33	150.60
Miscellaneous	216	1.8	14,119	(8)	3.14	65.36
TOTAL	11,942	100.0	\$449,644	*	100.00	\$37.65

* In order of priority as to amounts involved.

TABLE 33
(Family Allowances Division)
BREAKDOWN OF OVERPAYMENTS
DISCOVERED IN FISCAL YEAR ENDED MARCH 31, 1951

PROVINCE	Birth Date Errors		Non School Attendance		Non Maintenance		Child Deceased		Non Residence		Duplicate Accounts	
	(Accts)	(Amount) \$	(Accts)	(Amount) \$	(Accts)	(Amount) \$	(Accts)	(Amount) \$	(Accts)	(Amount) \$	(Accts)	(Amount) \$
Newfoundland.....	75	1,552	251	4,821	47	2,225	65	927	10	219	3	83
Prince Edward Island.....	.....	.....	106	1,457	14	353	9	93	4	40	.....	.....
Nova Scotia.....	1	5	365	6,796	73	1,448	40	2,051	21	532	.....	.....
New Brunswick.....	65	3,007	455	10,214	52	1,297	13	341	19	777	3	83
Quebec.....	508	41,306	525	25,933	523	40,213	530	37,658	84	2,759	103	20,554
Ontario.....	27	1,291	336	8,832	220	9,730	213	14,627	78	2,678	25	4,235
Manitoba.....	19	820	137	3,330	114	3,329	49	998	24	500	.....	.....
Saskatchewan.....	27	1,378	68	1,548	144	7,220	55	958	16	629	5	426
Alberta.....	8	364	280	7,021	155	2,719	30	300	21	1,188	5	526
British Columbia.....	14	791	292	7,986	205	6,488	99	835	56	3,182	5	158
Yukon & N.W.T.	12	759	2	19	161	3,353	80	4,053	.....	.....	12	2,423
TOTALS.....	(756)	51,273	(2,817)	77,957	(1,708)	78,375	(1,183)	62,841	(333)	12,454	(161)	28,488
(Percentage)	11.40%		17.34%		17.43%		13.98%		2.77%		6.34%	

BREAKDOWN OF OVERPAYMENTS (Cont'd)
DISCOVERED IN FISCAL YEAR ENDED MARCH 31, 1951

PROVINCE	Immigration Requirements		Internal Errors		Working for wages		Other Causes		Total	
	(Accts)	(Amount) \$	(Accts)	(Amount) \$	(Accts)	(Amount) \$	(Accts)	(Amount) \$	(Accts)	(Amount) \$
Newfoundland.....			25	969	65	1,577	6	125	547	12,498
Prince Edward Island.....			2	15	9	128	1	256	145	2,342
Nova Scotia.....			86	6,140	96	1,859	11	362	693	19,203
New Brunswick.....			30	1,564	37	789	7	241	681	18,263
Quebec.....	2	484	122	7,835	1,839	48,898	58	9,443	4,294	235,083
Ontario.....	4	946	76	9,280	1,505	27,331	19	1,488	2,503	80,438
Manitoba.....	4	76	1	16	188	3,226	58	1,000	594	13,295
Saskatchewan.....			9	229	86	1,630	12	370	422	14,388
Alberta.....			45	1,531	141	2,699	12	95	697	16,443
British Columbia.....			34	1,300	359	5,508	27	612	1,091	26,830
Yukon & N.W.T.....			3	97	.....	.....	5	127	275	10,831
TOTALS.....	(10)	1,506	(433)	28,976	(4,325)	93,655	(216)	14,119	(11,942)	449,644
(Percentage).....	0.33%		6.44%		20.83%		3.14%		100.00%	

TABLE 34
(Family Allowances Division)
BIRTH VERIFICATION

PROVINCE	Balance still to be verified March 31, 1949	Balance still to be verified March 31, 1950	Balance still to be verified March 31, 1951
Newfoundland		30,528	9,826
Prince Edward Island	351	230	597
Nova Scotia	1,953	1,432	5,039
New Brunswick	3,365	4,479	3,850
Quebec	95,731	88,905	51,621
Ontario	23,709	17,883	28,659
Manitoba	3,911	2,642	4,089
Saskatchewan	3,220	2,491	2,941
Alberta	5,289	3,276	4,790
British Columbia	6,570	4,642	4,890
Yukon & N.W.T.	563	313	267
TOTAL	144,662	156,821	116,569

TABLE 36 (Family Allowances Division)
REPORT OF PROSECUTIONS, MAY 1947 — MARCH 31, 1951

PROVINCE	Com- pleted	Aban- doned	Under Way	Total	Non Maintenance	Duplicate Accounts	Dual Recipients	Fictitious Children	Non Residence	Deceased Child	Child Working for Wages
Newfoundland.....	0	0	0	0							
Prince Edward Island.	0	0	0	0							
Nova Scotia.....	3	0	0	3	2			1			
New Brunswick.....	2	0	1	3	2		1				
Quebec.....	39	5	18	62	11	26	4	15	4	2	
Ontario.....	9	2	5	16	8	1	1	1	3	2	
Manitoba.....	0	0	0	0							
Saskatchewan.....	0	0	1	1	1						
Alberta.....	5	0	0	5	4						1
British Columbia.....	2	1	0	3	2			1			
Yukon and N.W.T....	0	0	0	0							
TOTALS.....	60	8	25	93	30	27	6	18	7	4	1

TABLE 37 (Family Allowances Division)
REPORT OF PROSECUTIONS, APRIL 1, 1950 — MARCH 31, 1951

PROVINCE	Com- pleted	Aban- doned	Under Way	Total	Non Maintenance	Duplicate Accounts	Dual Recipients	Fictitious Children	Non Residence	Deceased Child	Child Working for Wages
Newfoundland.....	0	0	0	0							
Prince Edward Island.	0	0	0	0							
Nova Scotia.....	1	0	0	1	1						
New Brunswick.....	1	0	1	2	1		1				
Quebec.....	20	2	18	40	5	15	4	11	3	2	
Ontario.....	4	2	5	11	5	1	1		3	1	
Manitoba.....	0	0	0	0							
Saskatchewan.....	0	0	1	1	1						
Alberta.....	1	0	0	1							1
British Columbia.....	0	0	0	0							
Yukon and N.W.T....	0	0	0	0							
TOTALS.....	27	4	25	56	13	16	6	11	6	3	1

TABLE 38
(Family Allowances Division)
TRANSFER OF FAMILY ALLOWANCES ACCOUNTS BETWEEN PROVINCES
FISCAL YEAR 1950-51

	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon & N.W.T.	Total
TRANSFERS IN:												
April.....	15	17	73	107	221	411	163	305	291	225	31	1,859
May.....	26	44	143	87	216	664	227	332	373	216	19	2,347
June.....	35	39	137	101	366	637	223	366	415	361	24	2,704
July.....	39	41	162	118	324	746	224	265	426	366	23	2,734
August.....	36	43	156	106	324	683	230	226	351	367	38	2,560
September.....	51	32	161	103	293	939	241	277	482	406	34	3,019
October.....	35	41	195	153	385	1,123	250	266	448	433	33	3,362
November.....	37	31	193	113	473	1,128	308	261	538	594	28	3,704
December.....	34	17	142	112	291	1,030	261	168	377	436	28	2,896
January.....	30	29	135	96	354	865	287	208	350	540	34	2,928
February.....	25	21	134	109	336	747	222	117	314	363	22	2,410
March.....	37	28	152	73	282	593	174	148	216	244	18	1,965
TOTAL.....	400	383	1,783	1,278	3,865	9,566	2,810	2,939	4,581	4,551	332	32,488*
TRANSFERS OUT:												
April.....	28	23	142	102	216	436	177	198	258	433	25	2,038
May.....	31	34	180	152	306	595	248	260	192	439	20	2,457
June.....	35	23	159	184	272	618	256	250	349	427	30	2,603
July.....	83	30	201	176	390	506	323	310	287	417	22	2,745
August.....	50	33	218	178	327	518	273	296	338	494	27	2,752
September.....	99	45	200	189	405	624	436	304	337	468	33	3,140
October.....	78	63	311	304	417	610	338	420	328	445	32	3,346
November.....	93	51	282	278	395	722	399	505	469	371	31	3,596
December.....	72	41	203	195	405	432	184	582	318	288	24	2,744
January.....	74	52	211	231	340	574	318	504	436	197	34	2,971
February.....	55	35	157	170	377	450	198	311	267	260	13	2,293
March.....	24	36	125	175	313	447	197	220	250	220	17	2,024
TOTAL.....	722	466	2,389	2,334	4,163	6,532	3,347	4,160	3,829	4,459	308	32,709*

* NOTE: Difference of 221 accounts in transit between provinces.

TABLE 39
(Old Age Pensions Division)

NUMBER OF PENSIONERS AND PERCENTAGE OF POPULATION,
BY PROVINCES
FISCAL YEAR 1950-51

PROVINCE	Number of Pensioners	* Percentage of Pensioners to Total Population	* Percentage of Pensioners to Population over 70 years of age
Alberta.....	17,990	2.01	47.47
British Columbia.....	31,983	2.81	44.67
Manitoba.....	17,573	2.21	45.06
New Brunswick.....	16,681	3.20	71.59
Newfoundland.....	11,394	3.21	82.57
Nova Scotia.....	20,808	3.16	59.28
Ontario.....	91,509	2.03	36.59
Prince Edward Island.....	3,136	3.27	50.58
Quebec.....	73,564	1.85	53.15
Saskatchewan.....	17,409	1.99	44.07
Northwest Territories.....	26	.22	14.21
Yukon Territory.....	100	2.04	30.49
CANADA.....	302,173	2.18	46.10

* Percentages based on the estimated population as at June 1, 1950 (Dominion Bureau of Statistics) except Yukon Territory and Northwest Territories which are based on 1941 Census.

TABLE 40
(Old Age Pensions Division)

TOTAL PAYMENTS AND AVERAGE MONTHLY PAYMENTS BY PROVINCES
FISCAL YEAR 1950-51

PROVINCE	Average Monthly Pension	Dominion's Payments for Fiscal Year 1950-51	Dominion's Payments since Inception of Act
Alberta.....	\$37.63	\$ 5,876,261.07	\$ 44,913,277.68
British Columbia.....	36.95	10,252,116.30	67,521,555.74
Manitoba.....	38.34	5,984,845.37	52,855,269.33
New Brunswick.....	36.48	5,427,021.19	37,267,613.93
Newfoundland.....	38.01	3,819,074.12	6,048,520.53
Nova Scotia.....	35.65	6,572,266.69	48,601,590.73
Ontario.....	37.79	30,065,393.84	253,295,649.08
Prince Edward Island.....	34.38	945,051.64	5,800,523.45
Quebec.....	37.71	24,478,750.17	166,144,905.73
Saskatchewan.....	37.51	5,798,980.18	51,426,444.18
Northwest Territories.....	39.55	11,221.13	70,202.38
Yukon Territory.....	38.53	37,023.83	61,508.21
TOTAL.....		\$99,268,005.53	\$734,007,060.97

TABLE 41
(Old Age Pensions Division)

NUMBER OF BLIND PENSIONERS AND PERCENTAGE OF POPULATION
BY PROVINCES
FISCAL YEAR 1950-51

PROVINCE	Number of Pensioners	* Percentage of Pensioners to Total Population
Alberta.....	494	.055
British Columbia.....	661	.058
Manitoba.....	573	.072
New Brunswick.....	1,067	.204
Newfoundland.....	317	.089
Nova Scotia.....	1,048	.159
Ontario.....	2,408	.053
Prince Edward Island.....	127	.132
Quebec.....	4,016	.101
Saskatchewan.....	484	.055
Northwest Territories.....	1	.008
Yukon Territory.....	2	.041
CANADA.....	11,198	.081

TABLE 42
(Old Age Pensions Division)

TOTAL PAYMENTS TO BLIND AND AVERAGE MONTHLY PAYMENTS,
BY PROVINCES
FISCAL YEAR 1950-51

PROVINCE	Average Monthly Pension	Dominion's Payments for Fiscal Year 1950-51	Dominion's Payments since Inception of Act
Alberta.....	\$38.49	\$ 167,280.18	\$ 884,132.32
British Columbia.....	38.13	225,083.27	1,230,721.76
Manitoba.....	39.32	203,835.65	1,198,438.64
New Brunswick.....	39.00	377,556.11	2,425,548.01
Newfoundland.....	39.46	102,736.71	138,399.01
Nova Scotia.....	38.35	348,338.20	2,104,227.57
Ontario.....	38.66	830,484.95	5,197,653.97
Prince Edward Island.....	38.22	43,342.92	300,639.13
Quebec.....	39.07	1,430,107.11	8,335,916.54
Saskatchewan.....	38.96	171,023.91	1,107,156.46
Northwest Territories.....	40.00	600.00	2,180.00
Yukon Territory.....	40.00	720.00	960.00
TOTAL.....		\$3,901,109.01	\$22,925,973.41

* Percentages based on the estimated population as at June 1, 1950 (Dominion Bureau of Statistics) except Yukon Territory and Northwest Territories which are based on 1941 census.

TABLE 43
(Physical Fitness Division)
SUMMARY OF AMOUNTS AVAILABLE FOR AND PAID TO PROVINCES
UNDER THE NATIONAL PHYSICAL FITNESS ACT

	Amount of Matching Grant Available Annually (b)	Amount Paid in Fiscal Year to the nearest dollar (a)							Total Payments 1944-51
		1944-45	1945-46	1946-47	1947-48	1948-49	1949-50	1950-51	
Prince Edward Island.....	1,858.50	.....	.....	2,635	.....	4,185	1,859	1,858.50	10,538.50
Nova Scotia.....	11,301.75	7,418	6,748	12,486	8,685	14,002	11,427	10,415.36	71,181.36
New Brunswick.....	8,943.75	.....	.....	.....	2,187	6,281	8,944	6,771.84	24,183.84
Quebec (d).....	65,151.00	.....	.....	.....	.....	.....	.....	.....	.....
Ontario.....	74,063.25	.....	.....	.....	.....	.....	.....	74,063.25(1)	74,063.25(2)
Manitoba.....	14,269.50	.....	2,692	7,485	7,934	5,998	7,238	8,250.97(1)	39,597.97
Saskatchewan.....	17,520.75	.....	17,546	17,546	35,092	17,521	17,521	17,520.75(2)	122,245.75
Alberta.....	15,567.75	.....	23,071	15,516	19,488	14,674	16,464	15,567.75	104,778.75
British Columbia.....	15,993.00	16,016	.....	32,032	16,016	15,993	15,993	15,993.00	112,043.00
Northwest Territories.....	234.00	.....	.....	.....	234	234	234	234.00	936.00
Yukon (d).....	96.75	.....	.....	.....	.....	.....	.....	.....	.....
Newfoundland (d).....	6,175.05	.....	.....	.....	.....	.....	.....	.....	.....
TOTALS.....	231,175.05 (c)	23,434	49,555	87,700	89,635	78,885	79,680	150,675.42	559,768.82

- (a) The amount paid to the province in any one fiscal year does not necessarily coincide with the amount available to it in that year, as payments in respect of previous years may be included.
- (b) Amounts were originally calculated on a per capita basis of distribution to nine provinces. In 1947 they were recalculated to include the Northwest Territories and Yukon. The figures given are the recalculated amounts.
- (c) On entry of Newfoundland into Confederation in 1949, the annual federal grant was increased in order to make provision for the new province.
- (d) These provinces do not participate at the present time.
- (1) Payment for 1949-50 claim.
- (2) Claim for 1950-51 not yet received.

TABLE 44
(Physical Fitness Division)

SUMMARY OF ALLOTMENTS AND EXPENDITURES
PHYSICAL FITNESS DIVISION

FOR THE FISCAL YEAR 1950-51

ADMINISTRATION

Balance from fiscal year 1949-50.....	\$ 37,292.02
Parliamentary Appropriations 1950-51.....	74,868.00
	<hr/>
	\$112,160.02

EXPENDITURES —

Total Salaries.....	\$26,731.61	
Express, Freight & Cartage.....	919.85	
Telephones, Telegrams & Postage.....	688.27	
Printing, Stationery & Office Equipment.....	4,790.17	
Travelling Expenses.....	9,377.03	
Educational & Informational Publicity.....	23,062.13	
Professional & Special Services.....	3,800.35	
Sundries.....	642.46	
	<hr/>	
		\$ 70,011.87
Balance at end of fiscal year 1950-51.....		<hr/>
		\$ 42,148.15

ASSISTANCE TO PROVINCES

Balance from fiscal year 1949-50.....	\$175,588.52
Parliamentary Appropriations 1950-51.....	150,288.00
	<hr/>
	\$325,876.52

EXPENDITURES —

Prince Edward Island.....	\$ 1,858.50	
Nova Scotia.....	10,415.36	
New Brunswick.....	6,771.84	
Ontario.....	74,063.25*	
Manitoba.....	8,250.97*	
Saskatchewan.....	17,520.75	
Alberta.....	15,567.75	
British Columbia.....	15,993.00	
Northwest Territories.....	234.00	
	<hr/>	
		\$150,675.42
Balance at end of fiscal year 1950-51.....		<hr/>
		\$175,201.10

*This constitutes a late payment for the year 1949-50.

The claim for the fiscal year 1950-51 has not yet been received from this province.

TABLE 45
(Physical Fitness Division)
ASSISTANCE TO PROVINCES AND PROVINCIAL EXPENDITURES UNDER
NATIONAL PHYSICAL FITNESS ACT, 1950-51

PROVINCE	Provincial Department Responsible for Administration	Date of Expiration of Current Agreement	EXPENDITURE					
			TOTAL			PER CAPITA		
			Provincial	Federal	Total	Provincial	Federal	Total
Prince Edward Island..	Dept. of Education, Charlottetown.....	31 March, '52	11,166.50	1,858.50	13,025.00	.1174	.0195	.1369
Nova Scotia.....	Dept. of Public Health, Halifax.....	31 March, '52	12,636.61	10,415.36	23,051.97	.0218	.0182	.0400
New Brunswick.....	Dept. of Education, Fredericton.....	31 March, '52	9,488.21	6,771.84	16,260.05	.0207	.0148	.0355
Ontario.....	Dept. of Education, Toronto .	31 March, '52	464,468.79(1)	74,063.25(2)	538,532.04(1)	.1199	.0195	.1394
Manitoba.....	Dept. of Health & Public Welfare, Winnipeg.....	31 March, '52	12,237.29(1)	8,250.97(2)	20,488.26(1)	.0167	.0113	.0280
Saskatchewan.....	Dept. of Education, Regina....	31 Dec., '53	29,293.29	17,520.75	47,814.14	.0327	.0195	.0522
Alberta.....	Dept. of Education, Calgary..	31 March, '52	34,682.63	15,567.75	50,250.38	.0435	.0195	.0630
British Columbia.....	Dept. of Education, Vancouver.....	31 March, '52	94,805.28(1)	15,933.00	110,738.28(1)	.1159	.0195	.1354
Northwest Territories..	Dept. of Resources & Development, Ottawa.....	31 March, '52	13,316.00	234.00	13,550.00	1.1070	.0195	1.1264

(1) Complete returns for 1950-51 not yet available.
(2) Late payment for 1949-50 — payment for 1950-51 not included.

